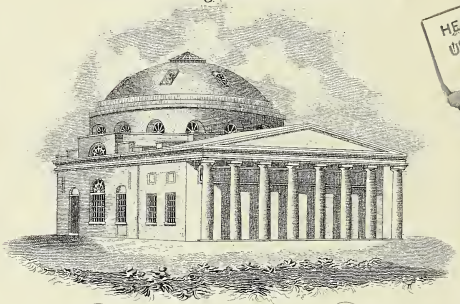
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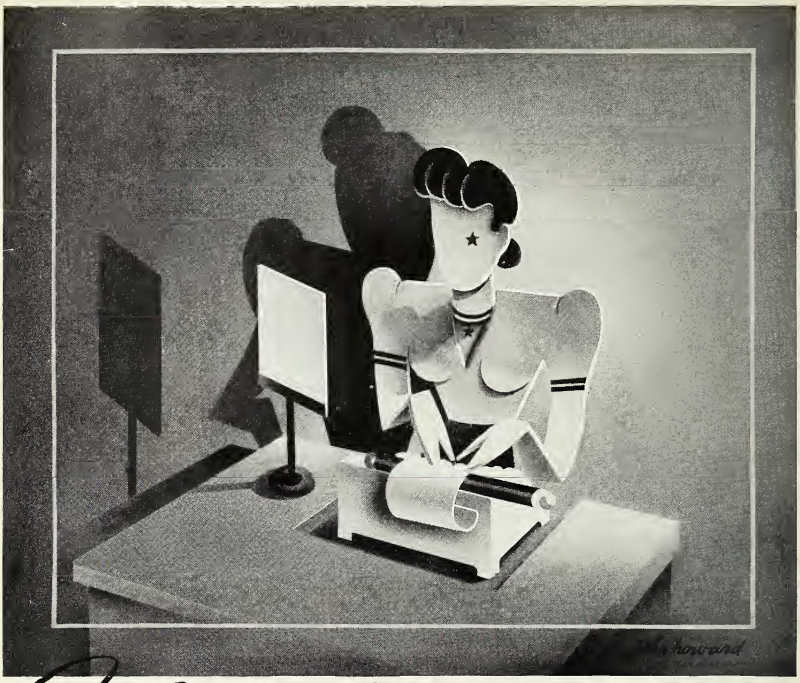
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THE DIAGNOSIS AND TREATMENT OF CARDIOVASCULAR EMERGENCIES ("HEART ATTACKS")*

PAUL DUDLEY WHITE, M.D.

BOSTON, MASS.

The discussion of cardiovascular emergencies is a subject of perennial and practical interest, constantly developing, and leaving much still to be learned.

I have prepared some lantern slides so that you may follow with me the simple discussion that I will present. (See tables I to V.) I cannot hope to cover in detail the whole field in this half hour, but I shall try to bring out the more important and practical considerations.

TABLE I.
HEART ATTACKS.

Fundamental points for consideration.

1. Determine the very first symptom.
2. Distinguish peripheral circulatory failure from the true heart attack.
3. Non-cardiac versus cardiac etiology.
4. Treatment of collapse.
5. Avoid routine use of morphine.

Initial or predominant symptom.

A. Pain in the anterior thorax.
B. Dyspnea.
C. Palpitation.
D. Prostration or syncope.
E. Hemoptysis.

The very first thing that we must consider in table I is the very first symptom which is by far the most important determination at the very beginning of our study of anyone having a heart attack. It is not always easy to question the victim of a heart attack. He may be in severe pain, or shock, or unconscious, but so far as is possible, a minute or two at the very beginning of our examination may save us a great deal of difficulty later. It is better not to treat a case at all than to treat wrongly, and hence the determination of the very first symptom is of prime importance. Was the first symptom pain, or dyspnea, or palpitation, or prostration, or syncope, or hemoptysis, or did several of these symptoms appear simultaneously in the sensation of the patient? When there are two or three symptoms almost simultaneously complained of, even then it is important to get the patient to try to tell which one he felt first; difficulties may arise if you do not. For example, I will tell you of a patient who came to our hospital for alcohol injection for angina pectoris, with pain which was obstinate and recurring at night. This patient was a middle aged woman who had no trouble other than that she would be awakened in the middle of the night by distress in her chest which made her sit up for a half hour after which the attack would subside. No doctor had seen her in an attack, but the distress was so definite that the patient entered for what was thought to be angina pectoris. Careful history, however, elicited the fact, by direct questioning, that the first symptom was not actually pain. The first symptom was that of palpitation, racing of the heart. The diagnosis, on further study, was speedily changed from angina pectoris to paroxysmal tachycardia. Alcoholic injection was not done. Quinidine was administered at bedtime, and this helped a great deal. She had far less disturbance of this sort. Her spirits revived. There is a good deal of effect on the mind, of course, when there is fear of angina pectoris, and in this respect she was very much better quickly. However, later on she developed typical gall bladder colic, with recurrent attacks. Her gall bladder was removed, and from that time on she has been free from her paroxysmal tachycardia and has had

* Presented before the General Meeting of the Indiana State Medical Association at the Fort Wayne session, October 12, 1939.

to take no quinidine. Her tachycardia at night was very possibly excited by her gall bladder disease, even before the typical colic developed. In this case, as is evident, the history was much more important than the examination.

In the course of the determination of the very first symptom, we must try to distinguish noncardiac from cardiac etiology. Pain in the anterior thorax, dyspnea, palpitation, prostration or syncope, and hemoptysis, may come from a variety of causes, many of them noncardiac.

We must distinguish peripheral from cardiac circulatory failure. The layman generally speaks of a simple fainting attack as a heart attack and, of course, syncope or collapse may occur with a true heart attack. The treatment of the collapse, whether it is due to heart disease or not, is, of course, of immediate importance. After the collapse has subsided, one may then treat the underlying cardiac or other disease.

It is also very important to avoid the routine use of morphine in every case of collapse, or with a supposed heart attack. Too much morphine is used. Occasionally I have seen patients with recurrent attacks of tachycardia, greatly distressed by the tachycardia, who had received morphine each time. It is very rarely necessary to give morphine in attacks of paroxysmal tachycardia, even for prolonged attacks, and since these attacks often occur time and time again, morphinism is easily acquired. I have had the difficult task of advising and treating a number of patients who had had these attacks, or "threatened attacks," over periods of many years, who had been receiving morphine frequently, even every day, and whose hearts were fundamentally sound. One difficulty is that the patient may not have an attack when he thinks he is going to have it. Having become habituated to the use of morphine the need for the drug may itself produce a little tachycardia, not paroxysmal tachycardia. The first attack or two, to be sure, may have been bona fide paroxysmal tachycardia. Thus is established a true cardiac neurosis. Time and again we see patients who are fearful of having heart attacks, and whose pulse rate goes up at little provocation; occasionally they become breathless, very apprehensive, have some distress in the thorax, and palpitation with elevation of heart rate. We are likely to say this is all simply a manifestation of neurasthenia, a neurosis, and that there has been no heart attack at all when actually there has been a paroxysm of tachycardia to start it off. The patient appreciates very much the extra care with which one analyzes his case, rather than to be relegated quickly to the group of neurotic cases. An ultimate neurosis is often dependent on some real disturbance at the beginning, even though there is no heart disease as such.

ACUTE ANTERIOR CHEST PAIN

Now let us take the subject of acute pain in the anterior thorax. (Table II.) A good many of the conditions which I have listed are not due to heart disease, and for some of them only infrequently does the patient call for help in an emergency. Angina pectoris, which lasts only a few minutes, acts as a real heart attack only at the beginning or in the first few weeks or months of its occurrence; later the patient becomes used to the trouble. Generally in the case of angina pectoris, by the time the doctor sees the patient, the attack is over. Pain produced in the anterior thorax which lasts more than fifteen minutes is not angina pectoris.

TABLE II.

HEART ATTACKS (continued)

A. **Pain in the anterior thorax.**
1. Angina pectoris.
2. Coronary thrombosis.
3. Paroxysmal tachycardia with status anginosus.
4. Dissecting aortic aneurysm.
5. Pericarditis.
6. The heartache of neurocirculatory asthenia.
7. Pulmonary embolism.
8. Cardiospasm and esophageal pain.
9. Other, non-cardiac, causes (muscle strain, bursitis, arthritis, pleurisy, herpes zoster, indigestion, gall stones, diaphragmatic hernia).

The heart attack in which there is severe prolonged pain is almost always coronary thrombosis. The pains of angina pectoris and of coronary thrombosis are exactly the same in position and in type, often in intensity, but different in duration, with rare exceptions. The pain has been well described since the earliest days by William Heberden and his successors—oppression and distress under the sternum, rarely in the rest of the precordium; pain in the region of the apex of the heart is almost always due to something else. There may or may not be radiation to the arms. Often the pain is limited to a small area. Rarely the pain of angina pectoris or coronary thrombosis starts in the arms and works up to the thorax. It is described often as a difficulty in breathing, and on several occasions we have found that what the patient complains of as difficulty in getting his breath is actually not that at all, but angina pectoris instead. So, if the patient says that he feels difficulty in breathing on effort, don't let it go at that. Ask him if he means real breathlessness, and imitate true dyspnea to him; the patient may say "Oh, no, I don't have to pant for breath. I feel as if I have a weight on my chest, which makes it difficult for me to get my breath."

There are relatively few painless cases of coronary thrombosis. We see rare cases and they are much talked about, but the more one studies these patients, the more one finds that they do have some distress, although it may not be very severe. It is rather the position and the type of pain than its severity that is important, and justifies the diagnosis of coronary disease. On the other hand, even with lesser attacks of coronary thrombosis, the pain may be excessively severe. Thus the severity

is not the important diagnostic point. Sometimes paroxysmal tachycardia with angina pectoris will simulate coronary thrombosis. Therefore, it is very important to note the heart rate at the time of your examination and to note from the history whether or not the attack had started with a very fast heart rate. Coronary thrombosis *per se* is not, as a rule, accompanied by an extremely rapid rate. Often the pulse is less than 100 during a severe attack of coronary thrombosis. Rarely is it as high as 130 or more. When, therefore, the heart rate is very rapid, the distress may be subjective discomfort from the tachycardia; it is important in every case to rule out distress that comes from tachycardia alone from the pain due to coronary disease. But there are a few cases of coronary disease who have real angina pectoris during paroxysmal tachycardia; this is the condition that most nearly simulates coronary thrombosis because of the duration of the pain.

Dissecting aortic aneurysms, which now and then occur to surprise us, generally have much more pain in the back than is true of coronary disease. Rarely in my experience does coronary thrombosis produce pain in the back. There may be slight transmission of pain to the back and shoulders, but rarely is the pain prominent in the back and almost never is it limited to the back, as it may be with a dissecting aneurysm. It is important to distinguish coronary thrombosis and dissecting aortic aneurysms, because of the difference in the prognosis. The coronary thrombosis patient is likely to recover from an attack; he has about nine chances out of ten, no matter how severe the pain is. On the other hand, individuals who have dissecting aortic aneurysms have only one chance out of ten to recover.

Pericarditis, of course, rarely causes sudden pain, making it an emergency, but I have seen a few individuals with such pain. It is important then in the examination to emphasize two points. Has there been any angina pectoris before, and second, is there pain on breathing? Pain on breathing is rarely, if ever, produced by coronary thrombosis, no matter how severe the pain; it is common with pericarditis. A friction rub is often heard early in cases of pericarditis, if heard at all. The electrocardiogram isn't always absolutely sure in distinguishing pericarditis from coronary thrombosis, though repeated records are invaluable. Following an emergency, an electrocardiogram is, however, essential not only in helping to make a diagnosis, but in determining the degree of involvement.

The heartache of neurocirculatory asthenia is at the apex of the heart, over the region of the lower part of the precordium and to the left. It is an aching sensation and lasts often for hours. It may radiate to the arms and is associated almost always with precordial tenderness. The heartache of neurocirculatory asthenia, strange to say, is associated with tenderness, while on the other hand I have pressed on the thorax of many a case of coronary thrombosis and there has been no sensation of tenderness; precordial tenderness is, therefore, a very important clue in distinguishing neurocirculatory asthenia from heart disease or as a complication of heart disease.

Pulmonary embolism is probably more frequently confused with coronary thrombosis than with any other condition, although the acute attack with obstruction of the pulmonary circulation may not cause great distress. Often the prostration due to pulmonary embolism has been one of the most difficult differential diagnostic problems that we have faced. There does tend to be more dyspnea with pulmonary embolism than with coronary thrombosis, but not always. Sometimes, however, the coronary thrombosis patient may have acute dyspnea. The same statements apply to cyanosis. Both conditions are associated with or quickly followed by fever and leukocytosis. The x-ray may or may not be helpful. The electrocardiogram is often the most useful differential diagnostic help in the first twenty-four hours, before any physical signs of infarcts are found. It affords almost conclusive evidence as to which condition we are dealing with. We must remember, however, that pulmonary embolism may cause a strain on the right ventricle and produce thereby changes in the circulation and in the electrocardiogram which might at first glance be confused with evidence of coronary thrombosis, unless one is aware of the characteristic changes which do occur. Moreover, it is very important to remember that a person with coronary thrombosis may have a complication of pulmonary embolism which may occur in the course of a week or two and recur. Rarely does coronary thrombosis repeat itself quickly. We don't often see patients who have several such attacks in the course of a few weeks or months. Usually there is just the one attack at the beginning and later attacks are more likely to be due to pulmonary embolism, which is much more apt to be rapidly recurrent than is coronary thrombosis. Most of the patients I have seen with coronary thrombosis have had intervals of months or years between their attacks. Rarely does one encounter individuals with pulmonary embolism occurring annually.

Cardiospasm and esophageal pain are the most difficult conditions to distinguish from angina pectoris, just as coronary thrombosis and pulmonary embolism are often so confused. Esophageal pain is in the same place as angina pectoris and the discomfort may be almost exactly the same but the underlying exciting factors are different. Angina pectoris is more often produced by exertion than by eating, while the reverse is true of cardiospasm. Thus an excellent test is exercise on an empty stomach. Nitroglycerin may relieve either condition.

There are various other noncardiac causes of pain in the anterior thorax. Muscle strain may

give discomfort lasting for hours or days, and if it is in the left side it may cause a good deal of worry. It is almost always associated with tenderness, of course. Herpes zoster is now and then a cause of confusion. Indigestion due to gall stones is more frequently confused with coronary thrombosis than is anything else except pulmonary embolism, especially in women. Of course, with coronary thrombosis nausea and vomiting are rare until after morphine has been given while they are common with gall bladder colic even before morphine. One of the reasons for not using much morphine in "heart attacks" is to avoid nausea and vomiting as much as possible. In this differential diagnosis, diaphragmatic (hiatus) hernia is also fairly common. Only rarely, however, does it give rise to great distress.

A point I wish to emphasize is that various conditions may occur in combination. Very commonly a person will have both coronary disease and gall stones, especially an older person. The chief reason why those two particular conditions are not necessarily closely related, however, is that gall stones are more commonly found in women and coronary disease more commonly found in men. That is a very important point to remember.

Now as to treatment. Never advise a person with angina pectoris to lie down during an attack. The pain lasts longer. Relief comes sooner in the sitting or standing position. Rest is of prime value, even though it is sometimes possible to walk off angina pectoris. On one occasion a patient told me that he was always stopped by angina pectoris on the first hole in golf, and that he got his second wind and played the remaining seventeen holes without difficulty. He was an ardent golfer, and one day died on the first hole. So, while it is possible to walk off angina pectoris, it is dangerous. Nitroglycerin and amyl nitrite are both effective, but nitroglycerin is easier to use and is less expensive. Many patients avoid using amyl nitrite because they dislike to break the pearls, and only have them on hand for very special emergency. Patients carrying nitroglycerin are much more likely to use it frequently, and there is no harm in its frequent use if the preparation is a reliable one. One two-hundredth of a grain at the outset is better to try than one hundredth; even one hundredth of a grain may cause faintness. In one week two patients of ours fainted as a result of using one hundredth of a grain, one of them right before me in my office. After carrying the medicine around for a long time without using it because he was afraid of it, he took a tablet for an attack which came on while dressing after my examination and promptly collapsed. It is important, therefore, to avoid overdosage.

There is one other fact about nitroglycerin which is important. It can be used as a prophylactic. It has prolonged lives in this way, I feel sure. Patients should take the tablets not routinely three or four times a day, but just before they are going to be under some necessary strain, for example, before an important conference or before a hard bowel movement. The effect lasts about half an hour. Nitroglycerin is more useful in prevention than it is in treatment of an attack of angina pectoris. Often the time comes when patients can control their activity so they don't need much nitroglycerin. I have some patients who stop at once at the onset of their attacks, take several deep breaths, and get quick relief in that way. I know of many persons who once used nitroglycerin but who have given it up and get along fairly well.

Never use morphine for ordinary angina pectoris. This starts a bad habit, because angina pectoris is usually often repeated. It is a different matter when we deal with coronary thrombosis, for there morphine is the important measure, along with absolute rest. Also, don't overtreat the collapse that may complicate coronary thrombosis. It is possible that the state of shock, with some drop in pressure, may actually help the heart by reducing its work. The use of large amounts of caffeine has seemed in some cases to cause too much cardiac irritation and tachycardia. To a certain extent the drop in blood pressure may be helpful, if not too great. Remember, incidentally, that coronary thrombosis can be in progress even with an elevated blood pressure, which may be raised as much as forty points, probably by the pain. We mustn't pay too much attention to the significance of blood pressure variations. For dissecting aortic aneurysms, morphine is also important, but not for pericarditis unless it is very severe. Remember to try to get along with as little morphine as possible in any condition, because morphine does induce not only a sluggish action of the bowels, with accumulation of gas, and depression of respiration, but it can cause nausea and vomiting, which itself may kill a patient who is precariously ill. A patient of mine who was recently suffering acute coronary thrombosis had, after morphine, a severe vomiting attack and died quickly in a paroxysm of tachycardia which was apparently brought on by the vomiting. Without so much morphine he might have weathered the attack of coronary thrombosis. Atropine sulphate, 1/150 grain, given simultaneously with the morphine, may reduce the tendency to nausea. The heartache of neurocirculatory asthenia is, of course, to be treated with as little medicine as possible, but with large doses of sympathetic reassurance.

Pulmonary embolism will need morphine as an emergency measure, and so it isn't a grave error not to distinguish right away between coronary thrombosis and pulmonary embolism. Oxygen should be mentioned as an important adjuvant in these conditions along with the use of morphine; it is valuable in reducing not only the dyspnea of pulmonary embolism and acute failure of the left ventricle, but also the pain of coronary thrombosis. Quinidine has sometimes been advised in the treatment of coronary thrombosis, but it is needed

only when there is arrhythmia. It is well to avoid all drugs unless they are absolutely necessary, but I wouldn't hesitate to use digitalis if there is any evidence of congestive heart failure. Dyspnea is the first sign of heart failure after a coronary thrombosis; the finding of rales in the lungs is much less important. If dyspnea develops on the second or third day, or any day after the attack, give digitalis at once, but not in massive doses. Cardiospasm and esophageal pain are to be treated by atropine or belladonna, by relief of nervous strain, dietetic control, and by the omission of irritants like tobacco.

ACUTE DYSPNEA

We come now to a consideration of heart attacks with dyspnea as the initial or predominant symptom. (Table III.) Before discussing paroxysmal dyspnea, Cheyne-Stokes' respiration may be considered. This can be very severe and even demand emergency treatment. Two or three remedies often help fundamentally. Cheyne-Stokes' respiration is dependent upon cerebral circulatory insufficiency, in which cardiac insufficiency often but not always plays an important role. If there is heart failure in such cases, digitalis should be administered and may help a lot. One immediate measure of treatment is oxygen. Sometimes it is difficult to get hold of oxygen at once but if the distress continues, as it may for hours, oxygen may help a great deal. For Cheyne-Stokes' respiration we have also the drugs aminophyllin and caffeine. Used separately or simultaneously, they may smooth out the respiration. Aminophyllin intravenously, in the dose of 4 grains, or caffeine sodium benzoate intramuscularly in the dose of 7½ to 15 grains, may regulate the respiration and improve the mental state.

TABLE III.

HEART ATTACKS (continued)

B. **Dyspnea as the predominant symptom.**
1. Paroxysmal dyspnea.
 a. Left ventricular failure.
 b. Mitral stenosis.
 c. Pulmonary embolism.
 d. Spontaneous pneumothorax.
2. Cheyne-Stokes respiration.
3. Sighing respiration.

Paroxysmal dyspnea is caused in the great majority of cases by one of the following four conditions: (1) acute failure of the left ventricle, (2) acute congestion of the lungs due to tachycardia in severe mitral stenosis, (3) pulmonary embolism, (4) spontaneous pneumothorax. In the case of heart disease, pulmonary edema is not shown in its early stages by the presence of rales and, moreover, rales can be found without edema of the lungs. There may or may not be coughing and blood spitting in paroxysmal dyspnea.

In pulmonary embolism, contrary to current opinion, there is very often no cough or blood spitting. Don't wait for such signs before diagnosing pulmonary embolism. Pulmonary embolism is associated usually with more dyspnea than oppressive pain but sometimes the reverse is true and may lead to difficulty in diagnosis. We often think of pulmonary embolism as post-operative, or following an accident, but forty per cent of the cases we have seen at autopsy at the Massachusetts General Hospital have been medical cases, and seventy per cent of those have shown no clinical evidence of peripheral thrombosis even though present. Thus the source has been concealed in seventy per cent of the forty per cent of cases that have been due to medical causes. Pulmonary embolism may come from thrombi inside the right heart, but much more commonly from the veins that are obstructed in various parts of the body. Not infrequently the external evidence of phlebitis appears after the pulmonary embolism.

Paroxysmal dyspnea may or may not excite asthma, but you can have severe pulmonary congestion and death from it without the asthma. You can have asthma due to many other things than congestive heart failure. Cardiac asthma is simply an asthmatic reflex produced by a variety of causes so far as the heart itself is concerned.

One must distinguish primarily the two causes of paroxysmal dyspnea: namely, mitral stenosis with tachycardia, and left ventricular failure due to chronic hypertension, aortic valvular disease, or coronary thrombosis. In the latter the left ventricle enlarges at first and then, some day or night, acute dilatation of the left ventricle occurs with pulmonary congestion with or without cardiac asthma, and with or without coughing up of bloody sputum. We do not have a frank hemoptysis in such cases. Hemoptysis in an acute attack, except in phthisis, is due almost always to pulmonary embolism; rarely mitral stenosis may be associated with a frank hemoptysis. Most of the pulmonary edema in heart disease is due either to left ventricular failure or mitral stenosis. The latter is much less serious than the former. A short life is ahead for the cases with left ventricular failure, but the persons with mitral stenosis may live for many years, since their attacks are usually due to tachycardia, which subsides; if they can avoid tachycardia in the future, the outlook is not bad. A person with mitral stenosis may have the onset of paroxysmal dyspnea at the age of thirty from paroxysmal auricular fibrillation. When the heart rate doubles under such circumstances, the considerably narrowed mitral valve obstructs the increased blood flow and causes a congestion of the lungs to the point of acute dyspnea, with or without cardiac asthma. When that attack of tachycardia subsides, the pulmonary circulation may become relatively normal again. In such a case the heart muscle is not failing; it is a matter wholly of mechanical obstruction. When such a patient is digitalized during the auricular fibrillation, so that the heart rate is controlled, he or she may

remain in good health, without any marked pulmonary congestion, for many years.

A patient with left ventricular failure should be digitalized quickly. Usually full digitalization should be carried out in the course of a few days. It should be insisted upon and the drug continued for the rest of that person's life. By full digitalization one may avoid recurrence of dyspnea or edema, even for years. Other treatment, except oxygen inhalation and morphine in the emergency, is much less important. Sometimes venesection is helpful, but usually it is not necessary. It can be tried as an emergency measure if other treatment fails. Glucose intravenously may be helpful if fluids are needed later for prolonged collapse or dessication, but not for the heart failure. Spontaneous pneumothorax can simulate paroxysmal dyspnea due to heart disease but it is usually readily differentiated.

I have seen three patients with neurocirculatory asthenia who suddenly developed, as a result of some nervous strain, marked dyspnea, with very deep sighing breathing, which in turn resulted in alkalosis and faintness.

PALPITATION

Now we come to the initial or predominant symptom of palpitation. (Table IV.) In the case of paroxysmal tachycardia it is of some importance to try to distinguish whether auricular or ventricular tachycardia is present. Electrocardiography tells this; a record can often be obtained during an attack. Ventricular tachycardia is much more serious. Four out of five cases of ventricular paroxysmal tachycardia have serious heart disease or poisoning. Ventricular paroxysmal tachycardia is often a forerunner of ventricular fibrillation and death in a patient severely ill with coronary thrombosis. Patients dying in the first week probably die of ventricular fibrillation more often than of any other cause. After coronary thrombosis it is well to look for abnormal heart rhythm during convalescence. If such is found, quinidine sulphate, 3 to 6 grains, should be given by mouth several times a day, especially if prolonged or recurrent attacks of paroxysmal tachycardia are found. If quinidine sulphate by mouth is ineffective, quinine dihydrochloride, 7½ grains, can be given intramuscularly and repeated every hour or so for several doses in the case of severe prolonged ventricular paroxysmal tachycardia, for death threatens such a patient. Mecholyl in the dose of 10 to 40 milligrams can also be given subcutaneously in the treatment of severe prolonged paroxysms of tachycardia; it is often effective but sometimes hazardous—atropine sulphate as an antidote should be on hand.

TABLE IV.
HEART ATTACKS (continued)

C. Palpitation.
1. Paroxysmal Tachycardia.
 a. Auricular.
 b. Ventricular.
2. Paroxysmal auricular flutter.
3. Paroxysmal auricular fibrillation.
4. Premature beats.
5. Neurocirculatory asthenia.
6. Heart block.

The ordinary case of auricular paroxysmal tachycardia has no heart disease at all. Doubtless a good many of us here have had such attacks. Digitalis can produce them, incidentally. Rarely does that drug act favorably to get rid of paroxysms. In the case of a person having a prolonged attack it is always well to try pressure on the carotid sinus in the neck, first on the right side, to see if such a procedure will stop an attack. It succeeds in about ten per cent of the cases. Recently I saw an old lady of seventy-two who had had attacks of paroxysmal tachycardia for fifty-two years. I saw her during an attack and pressed on her carotid sinus. The attack stopped magically. During the last two years she has stopped her own attacks by carotid sinus pressure and simply regrets the fact that she had not known of this simple remedy in the previous half century. It is not necessary to digitalize these patients. Quinidine sulphate (3 grains three or four times a day or 6 grains at the onset of an attack, or both) is more likely to be effective than any other measure. Often paroxysmal tachycardia is produced by the excessive use of tobacco, which may be also the cause of paroxysmal auricular fibrillation, by overstimulation. Even paroxysmal auricular fibrillation is not a sign of heart disease, even though the majority of the cases do have heart disease (especially mitral stenosis); quite a few normal persons have paroxysms of auricular fibrillation.

PROSTRATION OR SYNCOPE

The most common cause of syncope is not heart trouble (Table V) but peripheral circulatory failure. The state of shock resulting from coronary thrombosis may cause syncope. A state of shock may be due to many other serious things. Some persons with angina pectoris may faint in attacks.

TABLE V.
HEART ATTACKS (continued)

D. Prostration or syncope.
1. Neurocirculatory asthenia.
2. State of shock resulting from coronary thrombosis, pulmonary embolism, dissecting aortic aneurysm.
3. Prostration or syncope with angina pectoris or extreme tachycardia.
4. Morgagni-Adams-Stokes attacks due to high grade auriculoventricular or sinoauricular heart block.
5. Carotid sinus vagal reflex.

The drop in blood pressure in these various conditions should not necessarily cause alarm. "Simple" weakness and fainting are most common of all, distressing but not serious, dependent on a fatigued

or nervously upset balance, the cause of which can usually be traced and corrected; the mechanism is one of vasomotor origin with blood accumulating in the lower part of the body (splanchnic vessels particularly), thus deserting the brain and heart temporarily. Place the person in the recumbent position, treat with aromatic ammonia, caffeine, and heat. True Adams-Stokes' attacks and the carotid sinus reflex attacks are, fortunately, rare. The most important treatment of such attacks is still the use of adrenalin. Ephedrine and the other measures we formerly used are much less effective. It may be necessary to keep a person with Adams-Stokes' attacks, due to heart block, on adrenalin (½ to 1 cc. subcutaneously every few hours) for weeks or months, sometimes for years; lately adrenalin in sesame oil has become available, reducing the number of injections needed in 24 hours to one or two. Such patients, fortunately, tend eventually to get rid of their Adams-Stokes' attacks. We have had several patients who survived for many years. Carotid sinus disturbances may be relieved by avoiding tight collars and stooping or by the use of belladonna or atropine; they rarely require the operation of denervation of the sinus.

In this brief time I have covered some of the more important points about "heart attacks." I want to emphasize, in conclusion, the most important rules of all:

(1) Determine the first symptom.
(2) Don't over-treat.

MASSACHUSETTS GENERAL HOSPITAL

ABSTRACTS

EXTENSIVE BLOOD TRANSFUSIONS ADVOCATED FOR CRITICAL BURNS

Indiana Physicians Advance New Concept of Required Treatment, Contending Tannic Acid Theory Is Wrong

Early and repeated blood transfusions are imperative in the effective treatment of extensive and critical burns, H. M. Trusler, M.D., H. L. Egbert, M.D., and H. S. Williams, M.D., Indianapolis, contend in *The Journal of the American Medical Association* for Dec. 16.

They base their transfusion method of treatment on the need of compensating for the loss of the fluid part of the blood which escapes into the tissues of the body from the minute blood vessels which have been injured by the heat.

"The tannic acid theory of the treatment of burns is fallacious," the three physicians declare, adding that "there is no local application that can be expected to save life after a large burn.

"The toxic or poison theory has assumed that the burned flesh breaks down into poisonous split proteins which are absorbed into the circulation. It was this conception which led the late E. C. Davidson, M.D., to the tannic acid treatment with the thought of 'fixing' toxins or poisons. Fluids were forced, to aid in the elimination.

"It is now argued that this theory is fallacious. Certainly the treatment based on it has not prevented death from burn shock."

The chief factor in the mechanism of burn shock, the authors say, is the reaction of the capillaries or minute blood vessels to thermal or heat injury.

"Following a burn," they state, "the capillaries in the injured area dilate or expand. The circulation (of the blood) stagnates, and the blood plasma or fluid part of the blood escapes through these injured capillaries into the tissue spaces. If the burn involves a sufficient number of capillaries the patient dies of shock due to a loss of blood fluid so rapid that nothing can be done to replace it. Fluids injected into the vein merely wash out into the tissue spaces.

"The escape of fluid from the capillaries becomes generalized, extending first to the liver, lungs and other essential or functional organs and finally to all parts of the body. Because of the obvious drying up of the blood and the fever it is common practice to force fluids by injection into the vein and by mouth. Burned patients are thirsty because of the fluid loss and will drink enormous quantities of water. This is especially true of children, and because of the difficulty of injecting fluids into the vein in these patients they are often encouraged to take large amounts of fluid by mouth, the idea being that fluids of all kinds are indicated and can do no harm under these conditions.

"It is now known, however, that this reasoning is fallacious. When these patients are encouraged to take large quantities of water by mouth the burn shock is thereby complicated by a waterlogging of blood and tissues and by a disturbance of the energy or life-producing mechanism of the body which, for want of a better term, we have called water intoxication."

In support of their contentions the three men cite two cases, one of a girl aged 2 years who had fallen backward into a tub of hot water and whose burns were treated under the tannic acid method. Although her burns were superficial they were so extensive that her condition was considered grave from the start. Although blood transfusion was considered, the three physicians say, no blood was given. The child died four days later.

This case led the three men into research on burns. A year later a girl aged 15, badly burned when her evening dress caught fire from a lighted match thrown on a balroom floor, was brought to them for treatment. She had extensive burns of first, second and third degree, involving hands, arms, neck, chest, abdomen and back, with the deepest ones on her arms. Although the burns covered 55 per cent of her body surface and any involvement over 50 per cent usually is fatal, by means of their transfusion treatment the three physicians saved her life, and a month from the time she entered the hospital she was sent home.

In addition to the transfusions, other measures used in her treatment included administration of oxygen during the time she was in a grave state of shock and the local treatment of her burns with mild antiseptic wet dressings and an ointment preparation.

DIAGNOSIS AND TREATMENT OF PEPTIC ULCER*

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The breadth of this subject will permit only a brief discussion of some of its phases. The chronicity of peptic ulcer as emphasized in recent discussions suggests that this paper could not be more than a description of a course from an uncertain beginning to an unsatisfactory result and the more brief the presentation the better. However, the writer believes that there are less depressing observations which should be noted.

The apparent multiplicity of factors active in the causation and onset of peptic ulcer and the mechanisms involved in healing or chronicity make the subject most complex.

No matter whether we examine the etiology from the basis of family inheritance, diathesis, diet, gastritis, infection, vascular disturbance, or neurogenic causes, one factor is predominant—the effect of hydrochloric acid upon the gastric or duodenal mucosa and any lesion thereof. However, ulcers do not always develop in the presence of excesses of hydrochloric acid; ulcers heal and remain healed in the presence of excesses of hydrochloric acid; and, lastly, ulcers may develop when no excess of acid exists. Despite these exceptions, the intensity of the symptoms and degree of relief following alkalies or food commonly have been translated in terms of variations of hydrochloric acid. Local tenderness in the general location of the lesion and pain having a definite relation to hunger and food taking, habitually recurring in the early morning, sometimes accompanied by heart burn or eructations, or more rarely by nausea, have been accepted as characteristic of peptic ulcer.

Periodic recurrence and spontaneous remission, less frequently large hemorrhage, or more rarely perforation, added to the symptoms already enumerated, make the clinical diagnosis of most ulcers conclusive. Other symptoms may be present less frequently. Examination of gastric contents, feces, and blood, with proper x-ray studies confirm the clinical evidence.

Apparently no new and infallible diagnostic measures have been developed within recent time. However, techniques are under constant study and the interpretation of findings in competent hands has reached a high degree of dependability. Additional examinations may be necessary to exclude disease of other organs.

Hemorrhage and perforation are unpredictable and sometimes occur without recognizable symptoms prior to their appearance. These accidents are in themselves diagnostic, but are immediately of serious character. Early symptoms are frequently obscured, owing to the tendency of many people from childhood to expect varying degrees of consciousness of the digestive mechanism, or discomfort for which they resort to various home measures or patent nostrums.

The major diagnostic difficulties lie in the differentiation between ulcer and: (a) Functional disorders without pathology, (b) Disorders secondary to disease of other organs, (c) Malignancies. The early diagnosis of malignancy frequently offers great difficulty. Jensen and Rivers,[1] in a recent report, stated that in approximately fifteen per cent of instances it was impossible to be certain that a given lesion involving the pyloric ring was not malignant, even with complete x-ray and laboratory examination; also, that forty per cent of patients who had carcinoma reported distress several hours after meals and relief from symptoms upon ingestion of food or alkali in a manner simulating the symptomatology of ulcer.

In all but one case of this group of ulcer there was free hydrochloric acid, but in almost half of the cases of carcinoma free hydrochloric acid was found in the gastric contents although of lower degree than in the ulcer cases. In about one-third of the cases of malignancy, the history was indistinguishable from that of a benign lesion. From this basis, if x-ray evidence is not conclusive, it is helpful to determine if the lesion is on the gastric side of the pylorus or on the duodenal side. If on the gastric side, exploratory examination should be considered in the absence of other evidence of sufficient diagnostic dependability.

An intelligent approach to the problem of the treatment of peptic ulcer is dependent upon some knowledge of the pathology of the condition to be treated. The following is quoted from a recent article by H. E. Robertson[2]: "Apparently whenever congestion of the capillary network occurs, even with the normal physiologic stimulus of digestion, a slight overdistention in any local area may bring about a rupture of one or more capillary loops. Many of the causes of these hemorrhages are well known; excesses of food or drink, poisons of many kinds, local infections, mental disturbances, fevers, and anemias are but a few of the conditions in which gastric hemorrhages have been observed. As soon as the hemorrhage occurs, necrosis of the involved part is an inevitable result. This necrosis is promptly digested and leaves an ulcer, which ordinarily is promptly

* Presented before the Section on Medicine of the Indiana State Medical Association at the annual meeting in Fort Wayne, October 11, 1939.

[1] Jensen, R. M., and Rivers, A. B.: Carcinoma or Ulcer Involving the Pyloric Ring—Differential Diagnosis, *Proceedings Staff Meetings Mayo Clinic*, January 4, 1939.

[2] Robertson, H. E.: Ulcerative Gastritis and Residual Lesions, *J.A.M.A.*, January 7, 1939.

repaired with complete restoration of the integrity of the mucosa. In most instances probably the entire process is without a single discoverable clinical sign or symptom, unless perchance the modern science of gastroscopy may reveal these comparatively silent 'hemorrhage-necrosis-ulcer' syndromes."

William Beaumont described similar observations. A. J. Carlson reported frequent observations of this character. Robertson[2] further reported, "Some ulcers are sufficiently severe to leave residual lesions even when the outer epithelial lining is restored and the ulcer as such disappears." "These residual lesions are collections of lymphocytes, irregular thickening, and fibrosis of the muscularis mucosae, atrophy of the specialized gastric cells, and more or less hyperplasia of the mucous glandular cells with varying degrees of disorganization of the mucous glands." "The hyperplasia of the mucous glands may have some relation to the development of carcinoma." "Some ulcers persist for unknown reasons, and become chronic."

"It is suggested that lack of mucus may be one factor in delaying the healing of gastric ulcers, and furthermore that mucus production itself may in some manner be under cerebral control."

Harvey Cushing[3] in 1932 pointed to the occurrence of peptic ulcer and other similar lesions in the upper intestine in brain tumor. Upon certain experimental bases he reported evidence of relationship between the inter-brain and ulcer of the bowel. He suggested a neurogenic cause of peptic ulcer, and cited other writers prior to 1841. Many have made similar observations since Dr. Cushing's publication.

Shirley Harold Baron[4] recently reported a case of perforated peptic ulcer from an abscess of the brain of otitic origin. He stated: "The mechanism of the production of ulcer is probably a para-sympathetic-sympathetic imbalance, either through stimulation of the para-sympathetic center of the inter-brain or through paralysis of the sympathetic center from effects of lesions of the brain."

Von Bergman and others ascribed these ulcers to the autonomic nervous system causing local spasm and consequent diminished blood supply in mucosa exposed to said secretions.

Allergy as a possible causative factor is of considerable interest. Linz[5] described, among other effects, increased secretion, spasticity, and increased vascular permeability as a result of allergy. He also suggested that herpes in the stomach and duodenum may be the beginning of ulcer.

Ehrenfeld, Brown, and Sturtevant[6] studied seventy-five persons with proved peptic ulcer and concluded that "allergy is not a significant factor of peptic ulcer, and that peptic ulcer is not of increased frequency in allergy." However, they offered some support to earlier investigators who described an ulcer-like complex and localized spasm found in roentgenographic examination, also an angioneurotic edema-like reaction due to gastro-intestinal allergy.

Mann and Williamson, Mathews and Dragstedt, and others experimentally produced ulcers by impairing blood supply to tissues exposed to varying concentrations of hydrochloric acid.

Penner and Bernheim[7] recently reported ulcerative lesions in the esophagus, stomach, and duodenum, post-operatively or subsequent to diabetic acidosis in forty-seven cases. They concluded that the lesions were produced by the vasomotor mechanisms which constitute the response to shock. The anatomic explanation offered was that there is an increase in permeability of the capillaries resulting from stasis as a consequence of arteriolar constriction in response to shock. Edema and focal hemorrhages with later necrosis of tissue were reported.

The reported frequency of injury sustained by the gastric mucosa, as evidenced by bleeding, and the readiness with which healing takes place despite the action of acid gastric secretions, suggests that in a substantial proportion of ulcer cases there is a tendency to heal.

There is no census of the total number of ulcer cases. However, such estimates as are available in the main include only the more severe cases. Most medical writings are directed to the management and treatment of the more troublesome chronic cases and serious complications. Early and satisfactory recoveries may be much more frequent than is indicated by the statistics derived from this chronic group.

X-ray evidences of ulcer deformity, presumably healed, in patients without history of symptoms, are common. Autopsy findings of healed ulcer in those without ulcer history add to the number of those who apparently made satisfactory ulcer recoveries.

The writer has reviewed the applications for life insurance from one of the largest life insurance companies, including mixed urban and rural applicants from approximately one-half the area of Indiana over a period of ten years. Other histories accumulated throughout a long period were considered with them. The number of those who reported a history of gastric or duodenal ulcer medically treated, who stated that they had not

[3] Cushing, Harvey: Peptic Ulcers and the Interbrain, *Surg. Gynec. & Obst.*, July, 1932.

[4] Baron, Shirley Harold: Perforated Peptic Ulcer from an Abscess of the Brain of Otitic Origin; *Arch. Otolaryn.*, June, 1939.

[5] Linz, W.: Gastrointestinal Allergy; *Review Gastroenterology*, July-August, 1939.

[6] Ehrenfeld, I., Brown, A., and Sturtevant, M.: Studies in Gastrointestinal Allergy (Allergy in Pathogenesis of Peptic Ulcer); *Jour. Allergy*, May, 1939.

[7] Penner, A., and Bernheim, Alice Ida: Acute Post-operative Esophageal, Gastric, and Duodenal Ulcerations —Study of the Pathologic Changes in Shock; *Arch. Pathol.*, August, 1939.

had any recurrence of symptoms in five or more years was impressive. It might be said that the applicant for insurance might be inclined to hide evidence of recurrence and minimize his illness. It must also be recognized that those whose recoveries were not sufficiently established would not apply for insurance. The group who did apply would therefore reflect the results of this automatic selection of more satisfactory applicants. On the other hand, the group of patients included in hospital statistics and reports of gastro-enterologists in large city centers have undergone an automatic segregation because of their more serious or chronic illness.

The diagnosis of ulcer might be questioned in a portion of the permanent recovery group. However, x-ray examination was reported confirmatory in the larger number of cases, and the names of competent clinicians appeared repeatedly in the statements of these applicants. Of course, many had been cared for by general practitioners, the diagnosis being confirmed by x-ray; often it was not. Admittedly there may have been errors.

The clinical evidence of ulcer is, however, generally as distinctive and diagnostic as that of other medical conditions. I know of no medical evidence more characteristic than the type of discomfort, time of appearance, and manner of relief in peptic ulcer. The sharply localized tenderness, the history of onset, duration or recurrence, the suggestion of emotional instability or recent tension complete a picture comparable in diagnostic value to that of any other clinical evidence. A simple examination of gastric contents, of blood, and of feces can easily be made in the physician's office. The competent general practitioner should be able to handle this diagnostic problem in as satisfactory manner as in other abdominal conditions, and there is more opportunity for observation than in the acute abdomen. Obviously, all these conditions may require additional laboratory and x-ray aids, medical consultants, and in a certain percentage of cases, surgical consultants. This is certainly not impossible to the general practitioner. He should be stimulated to give attention to the diagnosis of the peptic ulcer or possible malignancy, at the earliest moment, in an effort to improve the end results of our treatment of these conditions.

The high tension individual, of unstable nervous constitution, exposed to emotional pressure, most often provides the conditions favorable for ulcer development, subsequent remission, and recurrence. It would seem that there is probably no condition in which the treatment must be more carefully fitted to the patient than in those presenting confused patterns involving social, psychiatric, and physical elements.

Many patients may progress more satisfactorily in their personal, social, and physical rehabilitation, under the advice and care of the local general practitioner, who knows them best. On the other hand, many require isolation from local stress and medical care under the impressive institutional machinery of a distant hospital. Some patients require prolonged bed rest for restoration from fatigue levels or relief from motor digestive discomfort. Some ulcers yield readily to bland diet and medicinal measures directed to reduction of gastric acidity; whereas, others are resistant to medical treatment, inclined to chronicity with profuse bleeding or perforation, and require immediate surgical consideration.

Basically the treatment may follow three avenues of approach: first, control of gastric acidity; second, control of motor abnormalities; and, third, search for underlying factors, altered physiology, or disorganized anatomical structure, which may be responsible for the occurrence of ulcer and its progress in healing. Much remains to be done in the study of these mechanisms.

Control of gastric acidity is important. However, in some respects it has come to dominate the treatment to such an extent as to be characterized by Brown and Dalkart[8] as the "Nothing but Neutralization" approach.

Neutralization may be accomplished to a certain degree by frequent administration of alkali and suitable foods, but it is generally not complete and not constant.

There is a wide selection of alkalies: soda, magnesia, and calcium as indicated by degrees of acidity and bowel effects, have been longest and most widely used. It is needless to review such a widely known and used method of treatment as that of the late B. W. Sippy.

All of the methods of treatment using large amounts of soda and magnesium have the objection that after a certain degree of neutralization there is an acid rebound. Also, the effects of alkalosis following prolonged administration of large amounts of these alkalies have been much discussed.

Eisele[9] in a recent study presented the following conclusions:

1. Tolerance to alkalies usually develops during the Sippy type of treatment of peptic ulcer.
2. In all patients receiving alkali therapy some degree of chemical alkalosis develops, but clinical alkalosis develops in few.
3. Symptoms of alkalosis are not correlated with the degree of chemical alkalosis present.
4. During alkali therapy, the work of the kidney is greatly increased. The urinary excretion of solids was found to be nearly doubled.
5. In the patients in whom clinical alkalosis developed during alkali therapy for peptic ulcer, a high incidence of preexisting renal damage was found.

Aluminum hydroxide in colloidal preparations has been much used and seems to avoid the dangers

[8] Brown, Clarence F. G., and Dalkart, Ralph E.: An Evaluation of the Therapy of Peptic Ulcer; *J.A.M.A.*, July 22, 1939.

[9] Eisele, C. Wesley: Changes in the Acid Base Balance During Alkali Treatment for Peptic Ulcer; *Arch. Int. Med.*, June, 1939.

of alkalosis. Adams,[10] in a recent evaluation of antacids, discusses various substances used, including colloidal aluminum hydroxide, and makes the following statement, "On the basis of its merits and freedom from the undesirable qualities of most antacids, it seems justified to repeat the statement, 'it appears that colloidal aluminum hydroxide is the most satisfactory antacid thus far employed.'"

Constipation is sometimes troublesome in the writer's experience. Whitcomb[11] recently reported fifty patients treated with colloidal aluminum hydroxide, forty-five patients treated with the Sippy regime, and more patients treated according to various other methods. The results with aluminum hydroxide were said to be definitely superior to those of other medical treatments.

Magnesium trisilicate, recently developed, possesses unusual qualities—its neutralizing action continues for a longer period of time than any other preparation used for that purpose. The extent to which this neutralization may be followed by rapid recurrence of acid may require longer observation, but thus far it seems to be satisfactory. It is reported to have anti-peptic and anti-toxic effects as well as its acid neutralizing properties. No toxic effects have been reported. Preparations supplied in the market are easily administered.

Mucilaginous preparations of vegetable origin, by reason of their soothing character, have been advanced as a means of controlling symptoms. Powdered milk adds to their efficacy in that it provides some of the acid neutralizing and bland effects of milk. They are helpful in the treatment of those patients having bowel irritation as well. However, they cannot be depended upon as the sole agent in well defined ulcer.

The use of gastric mucin in treatment of ulcer constitutes still another approach to the problem of protection of ulcers from irritation in order to promote healing. Based upon the assumption that the physiological provision of protective mucus is deficient in the peptic ulcer patient, this would seem to be a rational substitution therapy. Robertson[2] notes the absence of mucus in areas of erosion in the gastric mucosa after death from lesions of the brain. He stated that "In certain instances a definite line of thick mucus has marked the limit of the eroded area . . . without the layer of mucus the gastric juices etch the stomach wall. Further it is highly probable that mucus performs a similar function during life and may be the sole factor which prevents the stomach from digesting itself. When hemorrhage in the mucosa produces necrosis, the production of mucin in that area ceases and the necrotic zone is promptly digested until the living glands are exposed and fresh mucus reserves can once more inhibit the action of the digestive ferments. It is suggested that lack of mucus may be one factor in delaying the healing of gastric ulcers, and furthermore that mucus production itself may in some manner be under cerebral control."

Many clinicians have reported excellent results by treatment with gastric mucin. Brown and Dalkart[8] in a recent evaluation of methods of treatment stated: "The use of four daily doses totaling from four to eight grams, together with frequent feedings and the frequent administration of antispasmodics, has been more successful in our hands in reducing the incidence of recurrence than any other form of management."

It must be recognized that frequent feedings constitute a necessary feature of each plan of treatment. The fasting stomach in peptic ulcer quickly exhibits irritating acid secretions and disturbing hypermotility. Milk and cream mixtures have been the basis of most of these diets although some physicians prefer diets excluding milk. Gelatine has recently been returned to favor; it was used more than thirty years ago. It seems wise to emphasize that no matter what the diet, it must be adequate from the basis of body nutrition. The mistake has been made, at times, of restricting food too closely.

Even in the presence of massive bleeding from peptic ulcers, frequent feedings of bland food of ample total daily amount seem to give the best results. Of course, any general plan must be modified to meet individual conditions and the possible need of transfusions cannot be disregarded. Adequate vitamin intake is of the greatest importance and cannot be relegated to chance selection of foods by the patient. Iron may be necessary to overcome the effects of continued bleeding even though small in daily amount.

The approach to treatment from the basis of control of motility may be of greater importance than any other consideration. Abnormal motility, to the roentgenologist, is second only to actual visualization of the crater, in the diagnosis of peptic ulcer. Hypermotility with ulcer, or motor phenomena associated with an irritable bowel may be responsible for more discomfort to the patient than any other factors. The prevention of pylorospasm and maintenance of normal interrelation of action, between the stomach and duodenum, in control of secretion and emptying time, must be given attention constantly. Pyloric obstruction, if due to organic changes, is an indication for surgical intervention. For these reasons the degree of motor dysfunction should be determined by x-ray examination, as the diagnosis is being confirmed. Anti-spasmodic measures and medication are necessary. Control of motor disorders is of importance even in the absence of actual gastric retention. Experience suggests that interest has followed the introduction of each new antacid preparation too often to the temporary neglect of antispasmodic

[10] Adams, W. Lloyd: A Critical Evaluation of Gastric Antacids; *Arch. Int. Med.*, June, 1939.

[11] Whitcomb, B. B.: Results from Colloidal Aluminum Hydroxide in Peptic Ulcer Therapy: An Eighteen Months Survey at the Hartford Hospital, Hartford, Connecticut, *Conn.M.J.*, June, 1939.

agents. However, belladonna and atropine have long been accepted as valuable in treatment. Belladonna, taken twenty minutes before meals, in addition to reducing spasm in the pyloric section apparently prolongs the effect of the antacid treatment.

Vaccines and foreign proteins reflect the approach from the basis of chronic infection. They apparently offer no advantages in treatment, and observers report a higher incidence of recurrence.

The use of histidine hydrochloride represents still another approach. The reports of the mechanism of this treatment and results attained have differed widely.

Methylene blue, said to have been used by the French in the treatment of peptic ulcer is now being tried in this country. The indications for its use and the results to be expected require further observation.

This discussion would fall short of its purpose if it did not emphasize the need for further search for possible underlying general causes. This admits to a field which is almost boundless. As stated earlier, emotional instability, family inheritance, prolonged stress, fatigue, infection, dietary indiscretion, allergy, and finally vascular disturbance, have all been named as causes. But it must be admitted that these same conditions do not always cause ulcer. One or more additional factors must therefore be operative. There would be little ground upon which to speculate, whether this additional factor contributes only to the onset of the lesion or if it continues throughout the illness and determines whether the lesion shall heal readily or be resistant to treatment. From this basis the question arises: is there a practicable treatment to be directed to the vascular system, preventive in conditions accompanied by shock and curative in early ulcers?

Anatomic substitution of fibrous tissue in lieu of restoration of normal mucosa in the healing of the deeper ulcers was described by Robertson. He reported the transformation of the submucosa into a compact fibrosis, sometimes even invading the muscle layers. In other instances Robertson reported lesser invasion by strands of fibrous tissue occasionally partially enclosing small groups of gland cells and lymphocytes.

A. J. Carlson, in discussing Robertson's paper, pointed out the importance of these "occlusions" of gastric glands, having no openings, as the possible basis of miniature cysts in the gastric wall. Hyperplasia in the mucus glands in the scars of ulcers as reported by Robertson is of great interest as a possible background for malignancy.

These four pathological conditions—impaired blood supply, deep fibrosis, occlusions of gastric glands, and extensive hyperplasia, varying in degree—in chronic cases may determine the unsatisfactory course of medical treatment. The character of these changes indicate that they are permanent. How can they be recognized? Gastroscopy may develop to be of greater assistance. Pathological conditions which offer no promise of recovery under medical treatment should be given consideration from the basis of surgical measures.

Can surgical technics be improved so that there may be the maximum promise of restoration of normal physiological function at a minimum of operative risk? How can recurrence be prevented?

Obviously, further study is needed of those factors influencing the physiological processes in the structures involved, the mechanism of ulcer production, and measures which may be utilized to aid recovery.

108 NORTH MAIN STREET.

ABSTRACT

HOW THE FOOD, DRUG AND COSMETIC ACT MAY HELP IN CONTROLLING DISEASE

Ways in which the new Federal Food, Drug and Cosmetic Act may be expected to aid in the prevention and treatment of disease are discussed in *The Journal of the American Medical Association* for Dec. 16 by Theodore G. Klumpp, M.D., Washington, D. C., who states:

"While it is impossible to forecast to what extent the new act will ultimately aid the physician in his function of preventing and treating disease, one of the fundamental purposes of the law is to safeguard the public health.

"A few of the ways in which the act is directed toward this end are:

"The sections proscribing dangerous drugs and devices and injurious cosmetics and effecting more stringent control over deleterious ingredients in foods should bring about a lower general incidence of poisoning from these sources.

"The provisions which require disclosure of the active ingredients of drugs, adequate directions for use and warnings will aid the public in making more intelligent purchase and use of drugs. Similarly, the physician will be in a position to know the nature of the medication taken by his patients.

"Of particular importance is the protection provided by the act against marketing of new drugs which have not been adequately tested for safety. The enhanced safeguards against variations in the strength, quality and purity of drugs should be of particular interest to those who administer them. Likewise, the requirement that the labels of foods offered for special dietary use bear adequate information to inform the purchaser fully as to its value, for such use will enable physicians more accurately to evaluate and advise their patients.

"This act does not include within its scope jurisdiction over advertising. In a separate bill, the so-called Wheeler-Lea Act, passed March 21, 1938, Congress specifically delegated the regulation of advertising of foods, drugs, devices and cosmetics to the Federal Trade Commission."

ENDOTRACHEAL ANESTHESIA*

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Laryngeal intubation is not a development of recent years as its use dates back to 1800 A.D., and there are records of the endotracheal method of anesthesia having been used many years ago. However, during later years, the introduction of special rubber catheters for intranasal intubation has given a new impetus to this form of anesthesia, and represents a real advance in the art of this specialty.

The terms "endotracheal" and "intratracheal" are similar and both refer to the same type of anesthesia. The prefix "intra" is more commonly used in this country and the term "endo" in other countries. It has been suggested that the term "endo" be restricted to the oral method of intubation and the term "intra" reserved for the nasal method, but this distinction has not been commonly adopted.

Endotracheal *insufflation* anesthesia refers to the method of forcing the anesthetic mixture into the patient's lungs under a definite positive pressure, while the term endotracheal *inhalation* anesthesia applies when the anesthetic mixture is inhaled and exhaled through the endotracheal catheter at low or atmospheric pressure.

TYPES OF CATHETERS

Endotracheal catheters are made of rubber, gum elastic or silk woven material. They may also be made of coiled flexible wire, protected by a rubber coating, and equipped with a metal tip at each end. Such catheters have the advantage of non-kinking. Another special type of catheter is provided with an inflatable rubber cuff or envelope at one end. When the catheter is inserted, the balloon may be inflated with air, thus providing an air-tight fit, preventing the entrance of mucus or foreign material into the trachea or bronchus.

Catheters are made in graduated sizes, the length and diameter being varied to suit patients of all sizes and ages. In diameter the catheters vary from 22 to 40 (French) for adults, and for children the range varies from 20 to 25 (French). For adults the average length is 25 to 26 cm. or the average distance from the incisor teeth to within 5 to 7 cm. above the bifurcation of the trachea. One end of the catheter is bevelled to facilitate its insertion.

CARE OF CATHETERS

Endotracheal catheters when made of rubber should be kept in a circular container in order to retain their curved shape. The curvature of the catheter facilitates its insertion. Catheters may be sterilized by washing with soap and water, followed by alcohol; or washing with a weak solution of carbolic or bichloride of mercury. Boiling causes rapid deterioration of the rubber.

INDICATIONS FOR ENDOTRACHEAL ANESTHESIA

The endotracheal catheter may be used with advantage as an artificial airway in every major operation performed under inhalation anesthesia. It is especially indicated:

(a) For all operations about the head and neck, including operations on the nose, pharynx, larynx, intra-oral procedures and brain surgery. In the above cases the endotracheal catheter ensures an open airway under all conditions, and has the further advantage of removing the anesthetist from the operative field.

(b) For intra-thoracic operations, such as thoracoplasty, drainage of lung abscess, lobectomy, etc. For lobectomy, endobronchial anesthesia is indicated using an endotracheal catheter with a balloon attachment. During these operative procedures, blood, pus or mucus collecting in the endotracheal tube may be removed by means of the suction apparatus.

(c) For operations upon the thyroid gland. It is not necessary to employ an endotracheal catheter as a routine procedure in such operations, but it should always be available for use in cases in which an enlarged gland causes marked obstruction of the airway, or in the more uncommon event of actual collapse of the trachea.

(d) For all operations involving postural difficulties. The position of the patient during such operations as nephrectomy and laminectomy favors obstruction of the airway with resultant increased labor of respiration. For such operations the endotracheal catheter ensures freedom of the airway and simplifies the control of the anesthesia.

(e) For abdominal operations. The endotracheal method of anesthesia is of great value in all intra-abdominal procedures, such as cholecystectomy, and in pelvic operations especially when the extreme Trendelenberg position is employed. In cases of intestinal obstruction, the endotracheal catheter minimizes the danger of aspiration of vomitus.

CONTRA-INDICATIONS FOR ENDOTRACHEAL ANESTHESIA

The endotracheal catheters should not be employed in the presence of an acute infection of the upper respiratory tract, such as laryngitis or tracheitis. Its use is questionable in cases of acute mastoiditis, as infection of the upper air passages accompanies this condition. Insertion of the catheter may be difficult as a result of distortion of the larynx from new growths, retropharyngeal abscess, etc. Otherwise the use of the endotracheal

* Presented before the Section on Anesthesia of the Indiana State Medical Association at the Fort Wayne session, October 11, 1939.

catheter is contra-indicated only if inhalation anesthesia itself is contra-indicated.

METHODS OF ENDOTRACHEAL ANESTHESIA

Endotracheal anesthesia may be employed by either the oral or nasal route. The oral route is indicated for intranasal operations and the nasal route for intra-oral procedures, so that the catheter in each case will not obstruct the operative field.

Oral Route. This method requires the use of the laryngoscope. A relatively deep plane of anesthesia is indicated to provide the muscular relaxation necessary for the introduction of this instrument. Anesthesia having been established with ether, or gas-ether, the mouth is opened and the laryngoscope inserted, care being exercised to avoid injury to the teeth and other structures of the mouth and throat. When the larynx is exposed, the endotracheal catheter is inserted through the barrel of the laryngoscope and passed into the larynx to a maximum distance of one to one and one-half inches above the bifurcation of the trachea. The laryngoscope is then withdrawn and the end of the catheter attached by means of an adapter to the gas apparatus, and the anesthesia is continued in this manner. A rubber or wooden wedge inserted between the teeth will prevent the patient from biting the catheter if the level of anesthesia becomes too light.

In edentulous patients, introduction of the laryngoscope is relatively simple and may be accomplished under light anesthesia.

Nasal Route. Two methods are available—(1) blind nasal intubation, or (2) the direct method, using the laryngoscope.

(1) Blind Nasal Intubation

This method has the advantage of simplicity as it may be accomplished under very light anesthesia and without the use of the laryngoscope. Considerable practice, however, is necessary to achieve proficiency.

The technique of introduction of the catheter is the same for the various anesthetic agents employed such as ether, gas-oxygen, gas-oxygen-ether, cyclopropane, and intravenous anesthetics as Pentothal Sodium and Evipal.

Technique. The desired plane of anesthesia being established, select a catheter that will pass readily through whichever nostril appears more patent. Lubricate the bevelled end of the catheter with lubricating jelly or vaseline. Tilt the patient's chin upward until the head assumes a "sniffing the air" position. One hand is employed to keep the chin elevated and the free nostril closed. Insert the catheter into the nostril and pass it steadily downward; as it descends in the proper place the exhalation of the patient will be heard or felt passing through the tube. As the end of the catheter approaches the larynx, it may meet with resistance—due, as a rule, to the vocal cords being approximated. Do not attempt to force the tube further, but wait until the patient takes an inspiration, at which time the catheter may be readily passed into the larynx. Its entrance into the larynx is indicated by the characteristic note of the air passing through the tube, and coughing or breath-holding may occur. During the attempted intubation, it may be necessary to partly withdraw the tube and change its direction slightly, or to alter the position of the head to produce more or less flexion. Should the catheter pass backward into the esophagus, retching frequently results and the sound of breathing through the tube is absent. If several attempts at intubation are unsuccessful, withdraw the catheter and try the other nostril, as intranasal deformity may interfere with the passage of the catheter through one nostril while the other one may be unobstructed. The catheter should never be forced through the nose or into the larynx as nasal bleeding and damage to the soft tissues may result. With practice the operator develops a sense of touch or "feel" with the catheter and will be able successfully to intubate the great majority of cases.

With Nitrous Oxide-Oxygen. Induce anesthesia with the face mask, then remove the mask and quickly attempt insertion of the tube. If unsuccessful, re-anesthetize patient and repeat the attempt. Children are more difficult to intubate than are adults, probably because of the relatively small tracheal orifice in the former.

With Nitrous Oxide-Oxygen-Ether. Induce anesthesia with nitrous oxide-oxygen, using the face mask, and then add ether to the mixture. This method is indicated for children as anesthesia is thus prolonged, permitting more time for the introduction of the endotracheal catheter.

With Cyclopropane. Intubation with cyclopropane is relatively simple by either the oral or direct method as anesthesia persists for some time after removal of the mask.

With Pentothal. Intubation may be performed by either the nasal or oral route following the intravenous injection of Pentothal Sodium or Evipal.

With Carbon Dioxide. Intubation may be assisted by the administration of a few breaths of 5% to 10% carbon dioxide, given just before insertion of the catheter is attempted. The resulting hyperpnea frequently facilitates the introduction of the catheter.

With Local. Preliminary cocainization of the nose and throat abolishes the reflexes and thus makes intubation easier.

(2) Direct Nasal Intubation

A deeper plane of anesthesia is necessary with this method than by the blind nasal method, as muscular relaxation of the jaw muscles must be sufficient to allow of introduction of the laryngoscope. Anesthesia is established with nitrous oxide-oxygen plus ether supplement. The mask is then removed and the endotracheal catheter passed through one nostril into the posterior pharynx. The mouth is then opened, the laryngoscope in-

serted and the larynx exposed. The catheter is then pushed on down the pharynx and so directed that the end enters between the vocal cords. The end of the catheter may be grasped with a long-handled forceps and directed into the trachea.

ADVANTAGES OF ENDOTRACHEAL METHOD OF ANESTHESIA

(a) An open airway is ensured under all conditions.

(b) The control of anesthesia is simplified, and the muscular effort of respiration is reduced to a minimum. Endotracheal anesthesia is characterized by quiet effortless breathing.

(c) The aspiration of blood, mucus or other foreign material is prevented, thus decreasing the risk of postoperative pulmonary complications.

(d) The endotracheal catheter is of great value in artificial respiration, as positive inflation of the lungs with oxygen under pressure may be rapidly and effectively accomplished.

(e) The anesthetist is removed from the operative field.

(f) Economy of the anesthetic agent is effected.

DISADVANTAGES OF THE ENDOTRACHEAL METHOD OF ANESTHESIA

(a) The use of the laryngoscope requires a relatively deep plane of anesthesia if injury to the teeth or soft structures of the mouth and throat is to be avoided.

(b) The possibility of epistaxis, or damage to the throat or vocal cords if an oversize catheter is employed, or undue pressure or roughness used during its insertion. However, with ordinary precautions, this danger is slight. When it is considered how rarely does damage result from the use of the large rigid metal tube employed for bronchoscopic examinations, the use of a soft rubber endotracheal catheter does not constitute any particular hazard.

(c) The practice and experience necessary to master the technique. There is no substitute for experience, and with practice comes proficiency. The numerous advantages of the endotracheal method of anesthesia will amply repay the anesthetist for the time and effort spent in mastering the technique.

DISCUSSION

LILLIAN B. MUELLER, M.D., (Indianapolis): There is no question but that specialists in anesthesia should master the technic of endotracheal anesthesia. I think Dr. Clement is right in saying it requires practice. I think we should do it frequently so that when the need for it arises we will be able to do it and not try to use an unusual technic.

There are several questions I would like to ask Dr. Clement. I would like to ask whether you usually use cocaine, whether you use cocaine spray before doing an intubation, and I would like to know, too, what solution you sterilize your tubes in.

W. B. ADAMS, M.D., (Indianapolis): Some of us who are new at this game and are trying to introduce endotracheal anesthesia where it hasn't been introduced before wonder if pulmonary complications are more frequent with endotracheal anesthesia, whether it is just an unfortunate circumstance, and what Dr. Clement's experience has been in regard to this?

E. T. ZARING, M.D., (Terre Haute): I wonder if Dr. Clement likes the Magill better than any other tube?

DR. CLEMENT (closing): As regards cocaine spraying the throat, we do not use that method. Some anesthetists do employ it. I think Magill, in London, or some other anesthetists, use it as a routine, but we haven't found it particularly necessary. It probably would facilitate the introduction of the catheter by removing the reflexes and making the throat less sensitive in that respect, but it is just something else to bother with, and we have never employed it. We have done quite well with light gas anesthesia. Even when straight ether anesthesia is used, after the patient is asleep with ether, introduce the endotracheal catheter, and you will find that very much less ether is required. You can hook the end of the catheter up to the ether apparatus, or drop the ether on gauze placed over the end of the catheter, a drop at a time. Be careful, of course, not to let liquid ether go down the catheter. But when the endotracheal technic is used for anesthesia, there is a great saving of the anesthetic agent.

In sterilizing by boiling, the tubes perish rapidly. We usually wash them with soap and water, using a small wire brush to run through the catheter, dip in alcohol, and keep in a weak solution of carbolic acid. Some hospitals keep the tubes sterilized and in glass tubes, ready for use at all times. We are not that careful with ours. We usually wash them up and then carry them around in the anesthetic kit.

We haven't noticed any increase at all in pulmonary complications with the use of the endotracheal catheter. Any bacteria in the mouth or throat would probably get into the lungs anyway, and the few that may be pushed down by the introduction of a catheter matter not at all. An acute infection of the throat or pharynx would, of course, be a contraindication to the use of the catheter, but where there is no acute infection of the nose, or throat, or larynx, or mouth, I don't believe you have to worry at all about carrying infection into the lung. We have never run into any difficulty whatsoever that way, especially when you pack gauze around the catheter; it helps to keep blood, mucus, or other foreign material from entering the trachea. In case of intestinal obstruction, a catheter in place is a big help, especially a catheter with an inflatable cuff at the end, for this provides an airtight fit and then vomitus is not aspirated. Patients can die very quickly from aspiration of their own vomitus.

We use Magill tubes and we use some tubes of

our own make. If you get the right type of rubber you can make your own tubes quite well; they are better if they are cured in a semi-curved position. Failing that, if you make them of straight rubber, leave them in a round tin box where they will take a curve. Get soft rubber with as smooth a finish on the outside as is possible, and cut them off to whatever lengths you like. We use Magill tubes direct from England, as they are standard graduated sizes, and we also use some tubes of our own make, some of which we have had in use for several years.

TULAREMIA*

R. E. MITCHELL, M. D.
INDIANAPOLIS

The open season for rabbits is November 10th to January 10th. Although the disease is preventable, each year there are increasing numbers of cases of tularemia. It is estimated that there have been over six thousand reported cases, with approximately three hundred deaths.

Tularemia may be defined as an acute or chronic infectious disease, caused by the Bacterium tularense, occurring in man and animal. Primarily it is a disease of wild life. Secondarily, man becomes accidentally infected through association with any one of about twenty forms of rodents, particularly wild rabbits, or as a result of indirect transmission from animal to man by certain ticks and flies.

McCoy,[1] of the United States Public Health Service, first described the disease, in 1911, as a "plague-like disease" among ground squirrels. McCoy and Chapin, in 1912, discovered the causative organism, Bacterium tularense, while working on bubonic plague in Tulare County, in southern California, and they named the organism Bacterium tularense, since it was first found in Tulare County.

The history of tularemia is fascinating. Market men, butchers and trappers have long known that a strange sickness came from skinning rabbits. In 1907, United States Public Health physicians described illnesses which they called "rabbit fever" or "deer fly fever," a plague-like disease of rodents. It was found that many ranchers and farmers in Utah were incapacitated from a disease which they called "deer fly fever." Not until 1920 did Dr. Edward Francis, of the United States Public Health Service, discover that all of the variously named illnesses were the same disease, caused by the Bacterium tularense. Since the discovery of the organism in California, the disease has been found in almost every state in the Union, as well as in Russia, Japan, Norway, Canada, Sweden and Nova Scotia. Fifteen United States Public Health workers have been victims of laboratory infection with tularemia. Francis found that the serum of patients with this disease would agglutinate tularense cultures as long as eighteen years after the original infection.

Tularemia is in every respect the "first American disease." Physicians of this country should be thrilled by the thought that our knowledge of this disease has been entirely developed by American workers. In this respect, tularemia occupies a unique place in medical history.

TRANSMISSION

The disease occurs in wild rabbits, wild rats and mice, sheep, muskrats, opossums and cats. There is no record of the disease having occurred among domestic rabbits reared in rabbitries and sold for pets, food or laboratory investigation, although domestic rabbits are highly susceptible to experimental inoculation. The absence of tularemia in domestic rabbits is probably due to their freedom from ticks. However, if artificially inoculated, they succumb in about one week. The disease is perpetuated among wild rabbits through the bites of blood sucking deer flies, lice or ticks.

Bacterium tularense is aerobic; it grows as coccoids or bacilli according to the condition of the media. It may be recovered from the blood of patients suffering with the disease. It is not usually recovered from primary infective lesions.

Tularemia is commonly contracted by handling or dressing infected rabbits. The germ enters the body through a break in the skin. These wounds consist of cuts, punctures or scratches by fragments of shot-shattered rabbit bone, by knife, nail, barbed wire, thorn, briar, burr, splinter of wood or some other form of abrasion or puncture of the skin. The infection may also penetrate through apparently normal skin. There is apparently no danger of contagion from human infection. No nurse or doctor has ever contracted the disease from a patient. Six cases of tularemia inguinale lymphadenitis following tick bites among C. C. C. boys have been reported.

The disease may be transmitted to the eye by unclean fingers after picking ticks from a dog, or after cutting the finger while skinning a fox or groundhog. It may be transmitted through the ingestion of insufficiently cooked meat of wild rabbits. Death occurred in three out of seven cases in one family who ate an insufficiently cooked wild rabbit which had been found dead in a field. Two hunters died of tularemia following the ingestion of a hastily cooked rabbit which they had killed. There were two cases of chancroidal lesions occurring on the penis of men who had carelessly infected

* Presented before the Indianapolis Medical Society, November 21, 1939.

[1] Simpson, Walter M.: Tularemia. Paul Hoeber.

themselves while urinating after the dressing of infected rabbits.

PATHOLOGY

Pathology of macroscopic proportions is usually seen in the regional lymph nodes, spleen, liver and lungs. Axillary or inguinal lymph nodes are usually enlarged and caseous. The liver and spleen are both enlarged and show many small abscesses giving a characteristic, yellow studded appearance. There are usually foci of caseous necrosis and marked hyperplasia of the reticuloendothelial cells.

CLINICAL TYPES[2]

First, there is the ulceroglandular type, in which the primary lesion is a papule of the skin which later becomes an ulcer, and is accompanied by enlargement of the regional lymph glands. This type also includes cases of pulmonary and meningeal forms, nearly all of which present evidence of a skin route of infection.

Second, there is the occuloglandular type, in which the primary lesion is a conjunctivitis accompanied by enlargement of the regional lymph glands.

Third, the glandular type, in which there is no primary lesion at the site of infection, but there is enlargement of the regional lymph glands.

Fourth, the typhoid type, in which there is no primary lesion nor a glandular enlargement.

SYMPTOMS

The incubation period varies from one to twenty-one days. The onset usually occurs suddenly on the second or third day after inoculation. The symptoms are a chill, aching pains in the back and extremities, grippe-like feeling, fever, sweats, severe headache, vomiting, and marked prostration. The initial infection usually begins as a small ulcer at the point of infection, followed by glandular swelling. At first this ulcer is a painful, red papule. The center becomes necrotic and is liberated. This leaves a sharply circumscribed punched-out ulcer with a reddened periphery. There are reddish purple streaks ascending up the arm to the lymph nodes. The regional lymph glands are red, painful and swollen. Fever may last two to three weeks, or there may be afternoon rise in temperature occurring for many months. Following the onset of the disease, there is weakness, loss of weight, recurring chills, sweats and prostration, which characterize the active stage. The white blood count is moderately increased, and may reach 14,000. A skin eruption may appear at any stage as a transient erythematous rash. A primary lesion on the hand is usually single, but may be bilateral.

Convalescence is slow. The illness lasts from one month to several months or even longer than a year. Transient recurrences of fever may follow over-exertion.

Complications reported in sixty patients were pleurisy, bronchitis, broncho-pneumonia, lobar-pneumonia, pleurisy with effusion, and suppuration of the regional lymph glands.

DIAGNOSIS

Diagnosis of the disease may be made by securing a careful history. A history of the patient having recently dressed rabbits or handled dead rabbits found in a field, having been bitten by deer flies or ticks recently, or having dressed or handled rodents, such as ground squirrels, field mice, squirrels or opossums, is sufficient.

A persistent ulcer on the hand which will not respond to antiseptics, with regional lymph nodes which will not resolve, should direct attention to a history of the skinning or dressing of wild animals.

The agglutination of serum with Bacterium tularense definitely establishes the diagnosis. Tularemia serum sometimes shows cross agglutination with Brucella abortus and Brucella melitensis, and undulant fever sometimes shows cross agglutination with Bacterium tularense. Foshay has devised an intradermal test of a specific skin reaction of diagnostic value. This is especially useful in the first week of illness before the beginning of agglutinin formation.

This disease should be differentiated from suppurative staphylococcus and streptococcus infections on the hand with involvement of regional lymph nodes. It should be differentiated from influenza, septic infections, typhoid fever, pneumonia, tuberculosis, undulant fever, Rocky Mountain spotted fever, and sporotrichosis.

PROGNOSIS

Of 6,174 reported cases, 299, or 4.8%, terminated in death. Of twenty cases contracted by ingestion of improperly cooked rabbits, twelve resulted fatally.

TREATMENT

Treatment[3] may be divided into three types: prophylactic, symptomatic and specific.

Prophylactic Treatment: Keep bare hands out of wild rabbits, wear rubber gloves when dressing rabbits, discard rabbits with white or yellow spots on liver or spleen, or rabbits which have been shot while sitting, or lazy-acting rabbits. Thorough cooking of all wild game, especially of rabbits, is essential. Liberal use of soap and water and disinfection of hands to remove rabbit blood from hands, and disinfection of bites, cuts, punctures and scratches should be practiced, but this measure has often failed to prevent infection. Doctors, nurses and attendants on the sick have not contracted the disease, so isolation or quarantine is not necessary.

Symptomatic Treatment: Complete rest in bed, good nursing care, and supportive treatment for the pain and swelling in the arms and lymph nodes. Sulfanilamide has been tried. Surgical drainage

[2] Francis, Edward: Tularemia. Brennemann's Practice of Pediatrics, Vol. II, Chap. 29.

[3] Magath, Thomas B.: Tularemia, Diagnosis and Treatment. *Med. Cl. of N. Amer.*, May, 1937.

of liquefied lymph nodes and early x-ray treatments of local lesions have given good results.

Specific Treatment: Foshay's[4] antitularemic serum has been very effective. Two injections of 15 cc. each, intravenously, on successive days, has been recommended. The serum should be given as early as possible with the usual precaution against reactions. Improvement is usually noted on the third or fourth day. The mortality has been greatly reduced by the use of the serum. The best and most striking results are noted when the patients are treated during the first three weeks. After eight weeks it is questionable whether the results of serum treatment and the uncertain benefits to be gained justify its use.

REPORT OF A CASE

A white woman, age 44, mother of four children, dressed some rabbits on November 27, 1938. The day before, which was Thanksgiving Day, her husband had been hunting and brought in three rabbits. He dressed them rather hastily, and immersed them in a large pan of salt water. The following morning, Mrs. B. was removing the remaining small pieces of fur from the rabbits when she evidently inoculated herself. She had not seen or touched the rabbits prior to this time. Her hands were cracked and careworn, since she did all the work for seven people in the household.

On November 29, 1938, two days later, I was called to her home. She was complaining of aching all over. Her temperature was 100° F., blood pressure 140/90. Her pulse was 110. She did not complain of any lesions on her hands, nor did she tell me of the rabbit dressing episode.

Four days later, on December third, I was again called to her home. She complained of extreme prostration, lassitude, fever of 101° F., backache, and there were three small punched out ulcers on her hands. One was a small deep seated ulcer on the inner side of the right index finger. It had started as a small papule. The next day it was a pustule and, after discharging some thick pus, it still had a large amount of induration, swelling, and edema. The other two lesions were on her left hand. There were red streaks running up both arms. The epitrochlear glands and axillary lymph glands were swollen, palpable and tender, on both sides, more especially in the right axilla, where they felt hot and dry. She told me that two days previous to that she had had three chills. Her fever rose to 102° F., and her pulse was 100. She was nauseated and had severe headache in the back of her head. Her blood was positive for tularemia agglutination in a dilution of 1:80. Widal reaction for typhoid, and agglutination for undulant fever were negative.

At that time no antitularemic serum could be purchased in Indianapolis, and after a few days' delay, it arrived. On December fifteenth, 15 cc. of antitularemic serum was given intravenously in the left arm. The patient had previously been tested for serum sensitivity. The following day, December sixteenth, 15 cc. more of antitularemic serum was given.

The patient seemed to make remarkable improvement the first few days. Her temperature fell, prostration disappeared, urinalysis showed a clearing up of the coarsely granular casts and disappearance of pus cells and red blood cells. Her blood count at that time showed 76% hemoglobin, erythrocytes 3,990,000, leukocyte count 19,500, with 80% polymorphonuclears. Blood count taken one week later showed 3,480,000 red cells, 60% hemoglobin, and 18,000 white cells.

On December twenty-first the adenopathy in the right axilla was increasing in size and was very tender. Ulcers on both hands were sloughing and draining pus. Her temperature was 99° F. but she was extremely prostrated.

December thirtieth a second blood test showed tularemia agglutination in a dilution of 1:1280. It was still negative for undulant fever.

On December thirty-first, a fine pinpoint rash occurred all over her body, petechial in type, with only slight itching. The patient was extremely prostrated and looked very sick.

This lady was very much run down from the ordinary cares and duties of her household. In addition to that, her teeth showed very marked pyorrhea and sponginess with oozing from all the gums.

A blood count on January 5th, 1939, showed 4,480,000 red cells, leukocyte count 12,650.

She had lost twenty-two pounds of weight. Her weight at that time was 116¼ pounds. Her blood still showed agglutination for tularemia in a dilution of 1:1280. She was still very weak and remained in bed.

She was seen in her home during the months of December, January, and February. She was kept in bed for approxmiately three months. She convaleseed for another six weeks, being up part of the time.

She was able to come to the office for the first time on June 5th, 1939, six months after her original infection. She was still running a temperature of 101.8° F. Her blood pressure was 140/110. She was still tired and exhausted, and looked sick. Her blood still agglutinated in a dilution of 1:1280. Her blood count was 4,070,000 reds with 84% hemoglobin, 10,100 leukocytes, 34% polymorphs, 56% small lymphocytes, 8% myelocytes, and 2% monocytes.

Her teeth were then removed, two at a time, over a period of several weeks. All of her teeth have been out now for over two and a half months. Twenty-eight teeth were removed from her spongy gums. However, she is still running a fever of 99° F. She feels very much better. Her blood count has improved, but her strength has improved only slightly.

[4] Foshay, Lee: *Amer. J. Med. Sc.*, 187: Feb., 1934; and Foshay, Lee: Personal communication to author.

There are several interesting things about this case. In the first place, her husband, who dressed the rabbits, did not contract the disease. The wife, being in a run down condition, and having cracked hands, did contract the disease even after the rabbits had been soaking in salt water over night. Again, this patient was treated entirely in the home and in a large family where good nursing care was extremely difficult. The patient received both symptomatic and serum treatment.

Even after a year's treatment, the patient is far from being well, in spite of the fact that she stayed in bed for three and a half months, carried out orders well, and the family cooperated excellently.

3419 EAST TENTH STREET.

THE EFFECT OF TRANSPORTATION ON RURAL MEDICINE*

O. A. PROVINCE. M. D.
FRANKLIN

During the last seventy years the practice of medicine has changed fundamentally. Through the development of the laboratory and research facilities there has come a greater knowledge of bacteria, chemistry, pharmacology, and surgery. But one of the most drastic changes has come from something accepted without thought, and so simple that it is overlooked. This is transportation and its effect on rural medicine. Seventy years ago it was the horse which took the doctor to his patient. In his saddle bags were calomel, quinine, ipecac, jalap, etc. Outside of the family or a friendly neighbor, there was no one to help him. Upon his own knowledge, gained from medical school, books, pamphlets, and years of bending over the sick bed, and, above all, the ability of the patient himself to live, depended the outcome of the case. There was no easily available hospital, specialist, trained nurse, x-rays, laboratory, or ambulance. Whether the farm home in a clearing in the timber was a place of comfort or poverty, the patient received the same care; the well-to-do usually paid their fees, but the poor were carried on the books.

Now hard surfaced roads with long, balanced curves, planned by engineers, make (through speed and accessibility) the centralized, specialized medical care as readily accessible for the rural patient as it is for his city brother. The effect on medicine has been to change, in many cases, the focus of the patient's faith from the family doctor to the more impersonal hospital of the city medical center, or to the specialist. Now the patient knows that if the diagnosis and treatment of his case becomes too complicated for the family doctor, or if the patient or his family is not satisfied with his progress, he can have hospitalization or consultants from the city, if his finances can stand it. The poor man, too, knows that he probably can have tax paid care arranged by his township trustee or county judge, which will be just as good as if he paid well for it. Even the patient in the border-line financial bracket leans toward the thought that he probably can get state or county aid, and thus he is relieved of the worry which results from being carried on the doctor's books through indefinite periods.

The need for the family doctor still exists as strongly as ever. It is he who is the original diagnostician and upon whom may depend life or death. It is on his judgment and knowledge that the first diagnosis is made, but transportation has brought the consultant so near to the rural patient that it is often to the specialist now that the final credit goes.

It has been my opportunity to observe second hand in my father's experience and first hand in myself the changes which have come about in transition from decentralized to centralized medicine. The pendulum has swung too far towards centralization, many think, and the tendency now is to decentralize to a certain extent. Many of the young physicians today seem quite helpless without the aid of the modern paraphernalia of the mechanized hospital. The good horse sense which was one of the principal attributes of the old family doctor would no doubt help the modern beginner who has become almost too dependent on mechanical aid.

My father attended medical school at Miami University in Ohio for the two years following the civil war and graduated in 1867. Starting with his experience and adding my own overlapping thirty-five years of practice, I have a personal knowledge of rural medicine in Johnson County and central Indiana extending beyond seventy years. At first, my father's only means of transportation was horseback. Much land had been cleared and was producing, but nearly every farm had large tracts of timber thick with virgin growth of oak, hickory, beech and poplar. The ground held water and the roads, cut through woods and swamps, were only accessible by slow moving wagon or horseback. It was horseback for the doctor for the horse was quicker and could go any place a man could go, and the horse rarely mired down. Sickness consisted chiefly of malaria, typhoid, dysentery, lung fever and childbirth. I can see him yet in the back room of his small white office, grinding medicine in his mortar, rolling it out on the porcelain slab, then cutting, and rolling it into home-made pills.

* Presented before the Seventh District Medical Society at Martinsville, November 15, 1939.

There was a bond in those days between the patient and doctor which had a definite effect on the outcome of the case. One of the family went on horseback to fetch the doctor. The case was usually serious for there was no telephone to call the doctor out of bed to see someone who was more worried than ill. Galloping hoofs and the snorting of a hard running horse usually wakened the doctor before the call came: "Ho, Doc! Ho, Doc! Hello, hello!" This was followed by pounding on the door of the white house located on the corner opposite the store in Union Village. If it was winter, Dad crawled out of the warm feather bed and, without waiting to put on shoes, crossed the cold hall, and opened the east door. "Ma's going to have a baby, Doc," was usually the message. Sometimes it was "the baby's got the croup" or "Grandpap's taken bad." No matter what the call, Dad went. To fetch a doctor meant to go after him and bring him back. It was usually a serious case and Dad stayed as long as he was needed, perhaps all night. A close bond existed between doctor and patient under such conditions and the faith in the country doctor came somehow very near to faith in God. They might pray for God to save the baby, but it was from the doctor that the miracle was expected and often came.

A day time call often lasted into the night. I have heard my English mother get up and go to the kitchen when she heard horses' hoofs in the barnyard. She opened the drafts to the stove, and rattled the lids as she tried to get the fire roaring to make Dad something hot to drink and thaw him out. I have seen her help him out of his overcoat and stand it behind the stove—the coat so frozen that it would stand by itself until the warmth of the stove melted it into a crumpled heap of steaming wool which could then be hung up to dry. Dad always looked after his horse before he took care of himself for it was on the horse that he depended for his transportation.

As roads grew better, Dad was able to use a two-wheel sulky cart. This was somewhat more comfortable than horseback and could go almost any place that a horse could travel. It was much better for bad roads than the four-wheeled buggy which was to follow. The first four-wheeled buggies were open and afforded no means of protection from the weather. Gradually there came into use the top buggy to which later was added the front curtain which furnished still better protection for the occupant. During the last few years of his practice, Dad used an automobile. While it was not one of the cars of today, yet it speeded up his work and gave him more time to himself. I have driven in my car behind him and watched him in his Flanders (a small car put out by the Studebaker Company) take the sharp turns of the country roads, his inner wheels cutting deep into the dust while his outer wheels cleared it as he spun around the corner on two wheels. The feel of balance of the old buggy must have carried over to driving a car for he never had an accident.

Twenty-nine years after my father began practicing medicine, another Province entered the profession. This was my brother, Dr. Clarence Province,[1] who took his training at Jefferson. He did not go into practice in Providence with my father, but became the partner of Dr. Ossie Donnell of Franklin. His practice was made up of small city patients as well as rural patients.

In 1896 the roads were much better than when my father started, at least for certain periods of the year. Gravel road bonds were sold and main traveled roads were passable. Of course, the gravel was simply dumped on the road and not evenly spread. Summer winds and the grinding of steel bound tires carried much gritty dust over the fields. Winter traffic cut ruts several inches deep which froze and made ruts almost impossible to escape for miles at a time. The only rapid transit to Indianapolis was on morning and evening trains on the Pennsylvania Railroad. There were as yet no interurbans, automobiles or paved roads. At rare intervals a doctor from the city might be called in, but it was more of a gesture to satisfy the whim of a wealthy patient than as a thing considered necessary by either the country doctor or his patient. For the first few years, Clarence reached his patients in a top buggy with yellow wheels drawn by a grey horse, Jim, a rig which became recognized for miles around Franklin.

More was known about sepsis than in my father's time, and gradually Clarence began to do bedroom surgery. It was mostly accident cases, the successful removal of a leg or arm, or the dressing of an injury. I can remember one drainage appendix which he did up on the Avenue. This was in the poorer district of Franklin.

Dr. Donnell soon moved to California and it was not long until Clarence was practicing alone. The type of sickness was beginning to change somewhat. Malaria was almost unknown as the land was cleared and drained. Typhoid fever was increasing; appendicitis was recognized and the appendix removed; tuberculosis was being fought, and contagion in children's diseases was better known and the necessity for quarantine realized; grippe and pneumonia were prevalent, but the practice of medicine was still centered on the local doctor for transportation was poor. Dr. Clarence had an ideal temperament for the times. He was intensely interested in people and especially those who came to him. First of all he was a friend, but a friend who was a professional man with an ambition that his patients should have the best care that his knowledge could give them. For several years he remained the sole focus of his patients' interest. In those early years it was a rare occasion for him to call in a consultant. There have been times, however, when

[1] Dr. Clarence Province died January 22, 1932.

I have known him to call in his father to talk over a case, about which he wanted the benefit of father's long experience.

Meanwhile I had been in New York City for about eight years, graduating in 1902 from P. and S., but not returning to Indiana until 1905. The city hospital on Blackwell's Island, where I had my internship, was shut off from the city by the East River fogs many times, and could not be reached in emergencies by attending surgeons, so necessarily I became familiar with the surgeon's knife. Upon my return, I found Clarence surgically minded, and it was only logical that we should build our own small private hospital. If the automobile had been invented earlier and had been in general use a decade sooner with the good roads it brought of necessity, the hundreds of small private hospitals would never have been built. We bought our first automobile the year that we built our little hospital. Clarence and I owned the Maxwell jointly. It was more a gesture than a real help. In 1907 and 1908, Indiana had begun to suffer under a drought. Vegetation seared and the creeks dried and their mud bottoms checked into cracks like old kitchen china. Wells were low and typhoid broke out in almost epidemic proportions. The little buggy-type Maxwell car was left for town calls and Clarence's grey horse and my chestnut sorrel were used as well as a pair of Mexican ponies and a big raw-boned horse from the livery stable. It was day into night work, driving a horse which plodded through dust that rose as it was stirred by hoofs and wheels and sifted up into the buggy. Eyes became bloodshot in spite of dark glasses because of the dust, and the glare from the sun which was never covered by a cloud. Skin became dry and gritty and in spite of long linen dusters, clothes collected grit also. Some country doctors in our community were still applying heat in typhoid and pneumonia cases, so, at times, the doctor's treatment of a case had to be demonstrated by himself—blankets removed, doors and windows opened to whatever fresh air there was, cold baths given, the boiling of drinking water and milk and general preventive care taught.

After two years, Indiana again had rain. But hog lots and toilets drained into the filling wells, and there was still typhoid. A landmark in the practice of medicine in Indiana was the help which Dr. J. N. Hurty, secretary of the Indiana State Board of Health, gave to the county boards of health secretaries (of which I was one for sixteen years). He introduced legislation which gave local secretaries the power to demand the removal of toilets and hog lots to places where they would not contaminate drinking water. He also gave them the power to condemn rural schools where unsanitary conditions existed. Gradually typhoid fever was almost eliminated in Johnson County, and similarly throughout the state.

The heyday of the small private hospital was the twenty years from 1910 to 1930. It was the slow transportation problem which created the need for a private hospital such as my brother and I built. Many such hospitals are being built now, but not as near a city as was ours. Our small hospital was built to meet the need of quick hospitalization in our own practice. During the first decade we not only did hospital surgery, but much home surgery in our own and surrounding counties. Needless to say many of the operations were not done under the most ideal conditions, but they were the best that could be done under the circumstances. It was preferable to the slow laborious journey to take a patient from the country to the county seat and then by train or traction to the city hospital. This type of surgery consisted mainly of such cases as appendicitis, acute or ruptured, intestinal obstruction, strangulated hernia, gunshot wounds, etc.

The small private hospital was usually owned and run by the family physician in whom the family had confidence. Because the surgeon was a friend, the patient entered the hospital without the fears which in early surgery were often present with the country patient entering a strange, impersonal city institution. In reality the local private hospital educated the small town and rural population to the necessity for and the help to be gained in necessary hospitalization. The peak of usefulness of the small private hospital was during and immediately following the war. Today its need is gradually passing both because of rapid transportation and better facilities in the larger medical centers where there is division of labor and responsibility, where each medical man and surgeon is trained in his own special line.

An unbelievable change has come to the practice of medicine since my father saddled his horse and flung the saddle bags on behind him and made his lone way to his patient. The doctor of today still has a black bag in which are a few emergency medicines, but in it also are the stethoscope, the sphygmomanometer, the otoscope, the ophthalmoscope, and other things used as aids in arriving at a diagnosis. Where my father practiced alone, the modern doctor of today knows that he has the city hospital with all its equipment at his call if he needs it, but the place of the general practitioner in the small city or rural community is still as important as ever because it is upon him that the responsibility falls for the proper diagnosis and treatment, or for referring to others for treatment, the persons who are sick in his locality.

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WHY PEOPLE GO TO CULTISTS*

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TOPEKA, KANSAS

FOREWORD—The finding of an answer to the question, "Why do people go to cultists?" is of basic importance to the medical profession, not only as a matter of self-preservation but also to the broader aspects of the medical needs of the public. The following paragraph is quoted from the 1938 report of the Committee to Study Cultists: "Much could be written concerning the attitude of the lay individual toward the medical service he employs; likewise much could be said about the attitude of doctors of medicine toward the type of clientele who seek the cultists. This clientele is composed largely of psychoneurotics, and of incurables suffering from physical disease or affliction. The one interest of the sick individual is to get well as quickly, as conveniently, and as cheaply as possible. The present emotional and intellectual education of our culture does not lend itself well to giving the majority of people proper basis for sound judgment in the matter; likewise, the same factors lead to a large percentage of all illness being psychoneurotic in character, and representing the individual's compromise with his own reality. To enhance his well being, he easily turns to what in his judgment offers the quickest and easiest way out of his difficulties, and falls victim to the exaggerated and false claims of the cultist. It is pertinent to note that not infrequently a 'cure' is effected by the cultist, by his enabling the individual to find a way out of his own particular set of anxieties. By and large it would also appear that most doctors, through lack of training, or because of impatience, do not handle well this large class of illness, with the result that, in discouragement, the patient turns to the more optimistically promising course—the cultist. Enhancement of the education of the doctor of medicine in dealing with psychoneuroses and formulating a more optimistic psychology for the incurables, would seem indicated."

For some months this writer has had in mind the preparation of an article upon the above theme, but before the task was completed, Doctor Knight's article was published, and therewith his own effort was abandoned, for Doctor Knight has most effectively and pertinently answered the question, "Why do people go to cultists?" It is hoped that every member of our Association will give this article careful reading and consideration.

H. J. NORTON, M.D.,
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The medical profession is sometimes accused of being smugly intolerant of healing practices or suggested methods of organizing medical care which originate from without the profession. Well grounded in scientific thinking and abreast of the latest advances in medical science, the average physician looks with disdain on therapy as practiced by cultists, brands it as unscientific, and cannot understand how the cults can continue to thrive or how they can provide any real threat to organized scientific medicine. The apathy which characterizes the average physician's attitude toward the cults was well illustrated in the recent campaign in this state (Kansas) by one of the nonmedical groups to intrude into provinces of healing which the physician regards as his own by right of his scientific medical training. But however much we may view with disdain or attempt to disregard the encroachments on scientific healing made by the various healing cults and by the patent medicine vendors, most of us realize that these unscientific ways of "treatment" enjoy a tremendous following among the public, and that an enormous annual expenditure of money flows into such nonmedical channels.

It should be a matter of pressing interest to the physician to try to understand how such things can be. In this paper I propose to discuss some of the factors involved. I shall inquire into two general phases of the problem: (1) the character of the power of attraction which cults have for sick people; and (2) the possible factors in the attitude of the medical profession which may turn patients away from physicians to the cultists. In conclusion, I hope to show that the ultra-scientific physician may learn some lessons from his less scientific competitors.

As a background for understanding the attraction which cults have for sick people, I must focus attention briefly on some elements in primitive thinking. The progress of civilization, whenever it *is* progress, is toward an ultimate goal of scientific thinking and of utilization in all phases of living of the discoveries of science. If I use the words "science" and "scientific" repeatedly, it is because I must to emphasize their connotations. They derive from the Latin verb *scio*, meaning "to know." They pertain to the mature thinking and discovering and testing of the educated man, in contrast to the non-rational, magical, immature thinking of primitive man, of the child, of immature people, and of many sick persons. Most of the early struggles of civilization to progress were made against this type of thinking. But although our present civilization has reached a high scientific standard, it must never be forgotten that many of its members lag far behind the front ranks of scientific thinking, nor that each member of society must make his own individual progress from childish magical thinking to whatever level of mature scientific thinking he is capable of attaining.

Magical, primitive thinking involves little of what we psychiatrists call "reality testing." It substitutes wished-for beliefs for scientifically determined beliefs. It projects internal psychological fears onto the environment and then behaves as if the imagined dangers were really existent. Primitive man knew no other kind of thinking; children only gradually become capable of more mature thinking and discard their childish misconceptions

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and superstitions; and even among supposedly mature men of science there still may linger, in greater or lesser degree, remnants of this former fantastic, unscientific, superstitious type of thinking. Who among us is so advanced in his thought processes that he has no private superstitions—no beliefs in good and bad omens, no unrealistic disregard of threatened dangers because he strongly wishes to believe he is safe, no pet rituals of doing things in ways that are actually unscientific but to which he clings because he has invested his rituals with some magical power to ensure the successful outcome of his activities? The first step toward understanding the primitive thought processes of those whom we treat, or those whom we should treat but who shun us and rely on cult therapy, is to realize the presence in ourselves of similar magical, unscientific attitudes.

How does this conflict between rational, scientific thinking and primitive, magical thinking affect the situation of choice of cult or physician of a sick person who wants to get well? Every sick or ailing person becomes more childish and tends to rely more on his supposedly forsaken magical beliefs and wishes the more sick he becomes. As a child he felt that his parents were omnipotent. He sought love and security and a feeling of well being from them. Perhaps they even increased his belief in their magical omnipotence by telling him they would kiss his wound and it wouldn't hurt any more, or by providing the reassurance of their caresses and embraces which made him feel better when he was in pain, even though the pain was not actually lessened thereby. If they couldn't institute measures to relieve him they assured him that the doctor they called in would make him feel better; and they had great difficulty in getting him to understand and accept the idea that the doctor might have to hurt him or carry out some frightening procedure to make him feel better. And so, as an adult, when he becomes ill, he experiences a revival of these childish beliefs in magic or of childish fears in the face of which his adult habits of thought may be temporarily abandoned. He is ripe for the promise of cure of a special patent medicine or of a cultist who speaks reassuringly and authoritatively. Since a considerable proportion of the population remains at the level of childish thinking, to say nothing of its factual ignorance, it is not difficult to see that there will be an enormous response to magical medicines, magical procedures and magical pronouncements or reassurances of cure.

From the long range viewpoint, it was actually only yesterday that the most educated persons believed in the curative power of the King's touch for scrofula, of the sacred waters of some healing shrine, of religious conversion and faith. The day of belief in miracles is not past in the realm of healing, and supposedly educated, mature individuals find it hard not to believe in reported cases of miraculous cure of diseases and ailments that did not respond to medical therapy. It was only yesterday that even in "civilized" countries belief in witchcraft existed—belief in the power of one individual to do damage to another through thinking malignant thoughts, having malicious wishes, using magical methods to bring illness or death to a selected victim. Children indulge in such hostile fantasies; primitive men organized their whole lives on the basis of such beliefs in the power of malignant thoughts to do damage to enemies and on the basis of their own magical methods to combat and undo the magic of the enemy. Even the Bible, whose teachings are espoused *in toto* by many people, teaches that a thought or a wish is as bad as the deed. It is but a short step from such beliefs to beliefs in the power of good thoughts. And so considerable numbers of sick people needing scientific care rely instead on the "good thoughts" of Christian Science practitioners, or on the prayers and good thoughts of their fellow religionists, shunning the scientific remedies available to them.

The more unscientific the proposal for treatment, the greater is the exploitation of this persistent belief in magic and in the omnipotence of the healer to whom the patient turns for relief. The actual mystery, to most of us, of electricity is exploited in so-called electric treatments, with imposing looking machines. The childish experience of feeling better after parental caressing and rubbing and the racial experience of belief in the "laying on of hands" is exploited by those healers who promise relief through unscientific manipulative, touching and "rubbing" measures. The primitive belief in magical potions is exploited by patent medicine vendors. In whatever sphere of living there exist fears—fears of pain, fears of blood, fears of being poisoned internally, fears of loss of sexual potency, fears of loss of vision or hearing, fears of loss of locomotive power, fears of dread cancerous growths —one finds unscientific healing practices which provide reassuring promise of cure or relief, and multitudes of people who wish to believe in these promises.

The physician realizes his limitations. He knows where the frontiers of medicine lie. He admits that certain diseases still baffle him and all his fellow-practitioners of scientific medicine. He realizes that for many human ills he has no specific curative drug or procedure and can only provide supportive measures and trust to the self-healing powers with which the patient's body is endowed. For the cultist, however, there are no frontiers, no unknown lands. He promises that his methods will cure all human ills. It is hard for even mature, educated people not to believe these assurances that they wish to believe, and not to turn away from the physician who must honestly give a doubtful prognosis to the cultist who blithely promises a cure. This is a state of affairs that can be changed only by the slow rise in the cultural level, the slow progress of generation after generation toward a greater acceptance of scientific knowledge and a more complete discarding of primitive, magical ways of thinking.

So much for the first phase of the problem, the power of attraction that magical healing methods hold for sick people who have never outgrown or who have revived, during an illness, primitive beliefs in magic and distrust of science. Let us now examine the second part of the problem, a part about which physicians *can* do something. I refer to the attitudes within the medical profession which keep the cults alive, which drive people who seek medical aid away from physicians to the cultists.

It is possible for "scientific medicine" to be partly blind and unscientific as well. As science developed and progressed it attempted to discard all of its previous measures and beliefs which were found to have no scientific rationale. Blood-letting for a long list of ailments was abandoned, and used only occasionally for such diseases for which a reasonable basis could be shown, such as certain cases of hypertension. Cathartic purging for many febrile diseases was abandoned when it was discovered that this measure had been based on magical belief in internal bodily poisons which were supposed to be flushed out of the system, and that instead certain definite pathogenic agents could be discovered for different diseases, and these agents could be combated scientifically. Similarly, many therapeutic procedures utilized by medicine in the past were discarded in the light of more knowledge and newer discoveries. Medicine became scientific with a vengeance, and almost fanatically purged itself of magical elements. Medical schools taught anatomy and physiology and pathology and bacteriology mechanistically and scientifically. The patient became a physiological machine out of order and it was up to the physician to discover the pathology and treat it. If he could discover no pathology, then the patient was certainly not sick, and was to be looked upon with disdain. He was malingering or only imagining that he was sick. Later he was called a "neurotic" and dismissed from consideration. This somewhat supercilious, intolerant, supposedly rigidly-scientific attitude of physicians became the pride of the upright medical man and the despair of innumerable patients who sought relief from their ills. What if their temperature, blood count and urine were all "essentially negative" and their bodies yielded no indication of pathology to the scientific examining methods of the ultra-scientific physician? They still *felt* sick. And in addition, they now began to feel like impostors as physician after physician disdainfully reassured them that they were all right and told them to go home and forget about it. They consumed the placebos and sedatives condescendingly prescribed for them for a while but felt no better. Then they heard of somebody with a somewhat similar set of symptoms who had taken some treatments from a certain cultist and was thereafter vastly improved. Science couldn't seem to do anything for them and they had to have relief. It was very comforting for them to hear the reassuring promises of the cultist and they readily undertook his treatments. Strangely enough they often *did* feel better from his treatments. Perhaps they undertook to tell their physician that the new treatments were effective. If so, they usually encountered his patronizing smile and listened to his declarations that they were wasting their money. But they knew how they felt and they continued. Most of them didn't even bother to try to "enlighten" their former physician in the face of his attitude toward their complaints.

It is unrealistic and unscientific to attempt to discard and abandon a belief or a set of ideas without trying to understand why these beliefs and ideas existed. And this is just what medical science did with all of the former ideas and beliefs that it had embraced. It is also quite unscientific to blind oneself to the subjective factors in the patient and attempt to treat him merely as a machine out of order. But subjective factors, psychological factors, were regarded as outside the realm of science. They could not be assayed, measured, titrated, nor auscultated. They were just a nuisance intruding into the objective methods with which the physician was equipped to detect somatic pathology. If patients desperately tried to tell their stories, their troubles, their fears to the physician who was attempting to percuss their chests and palpate their abdomens, he terminated the interview as soon as he could without being discourteous, in order to get at other patients who were waiting and who really had a "very pretty case of apical tuberculosis" which he had triumphantly detected, or a "beautiful kidney tumor." I do not need to point out the obvious effect of such an attitude in driving patients to the cultists.

It is a step of progress which scientifically grounded physicians find it difficult to take, to accept the fact that there is also a science of subjective factors in the patient, a science of psychological processes, and to realize that disturbed emotions can cause complaints referable to organs and the actual malfunctioning of these organs. They are inclined to view with distrust the opening up of such a wide realm as the psychology of the patient, with all of its intricate complications, its subjectivity, its apparently fantastic quality. Even the scientific researches into the functions of the autonomic nervous system and the endocrine glands were distrusted at first because they seemed to pertain to a kind of bodily activity which was subjective and bewildering. The intricate interrelations between emotions on the one hand and autonomic activity and glandular secretions on the other seemed to be a further plunge into the unknown, away from the tenets of objective science. And when the investigation of the emotions involved attention to dreams and fantasies and "foolish" fears, and there was talk about the unconscious and the effect of childhood experiences, this seemed indeed to be getting into deep water.

But regardless of whether the physician is able to assimilate such subjective factors into his scientific concepts, there remains the reality of a large proportion of his patients made up of individuals

with functional complaints, people who are *not* malingering, who are *not* imagining they are sick, but people who *are* sick, and whose sickness can be understood and treated only in terms of these despised subjective factors. Furthermore, one cannot escape the fact that a patient who has a physical illness is also psychologically sick at the same time, and needs treatment from both aspects, physical *and* psychological. A physician who administers the correct treatment for the former but neglects the latter may fail to cure the patient, while another physician who administers the identical physical or chemical treatment may succeed in curing the patient if he also understands and treats the psychological needs of his patient. This may involve nothing more than sympathetic listening to the heightened worries and fears that accompany the physical illness, with appropriate advice and reassurance; it may involve drawing out concurrent conscious personality disturbances and conflicts and pointing out the relationships of these to the physical symptoms; it may involve more delicate probing into the intimate life of the patient and the bringing to light for intelligent, scientific solution of hidden disturbing fears and psychological conflicts. The physician was not taught how to do this in medical school. If, in spite of his training in strict medical science, he has preserved his interest in people *as people* and has not come to regard them as a collection of pathological organs, his own intuition about the inner psychological life of human beings may be sufficient to handle many psychological difficulties which complicate the physical illness of patients he treats, or which *are* the main illness of the patient. If his training was such that it shut out all such appreciation of his patients as individuals, each with his own psychological difficulties, then he must learn some science in the field of human psychology.

And now, in conclusion, we come to certain aspects of cultists' management of their patients, from the study of which physicians may profit. We observe that in spite of our aspirations to reach higher levels of science, cold science, mechanistic science, for want of a better term, will not suffice. There is a science of human psychology, of treating and handling human personalities. This means comprehending, understanding, and managing the magical, primitive beliefs, wishes, and fears of patients who either have never been able to discard these for mature, scientific attitudes, or who, under the stress of illness have fallen back on their supposedly discarded childish ways of thinking and feeling. The cultists are superficially correct in meeting this need for omnipotent magical assurance of cure, in their taking all of the patient's complaints seriously and sympathetically. Unfortunately, it becomes a case of the blind leading the blind, of magic applied to combat magic, without deeper understanding of the psychological factors involved, and, of course, without appreciation of the actual organic pathology present in those patients who are organically ill. Physicians must realize that some patients *do* get relief and *do* "get well" by cult treatment, simply because their psychological needs are met and satisfied by the treatment given, and must realize that these patients could have been treated successfully by physicians without the employment of unscientific measures or claims. For *all* treatment measures which meet the needs of the patient, either physiological or psychological, are *ipso facto* scientific in the broadest sense of the term. But one must know what he is doing, and must not develop a theory of illness on the basis of the success of the measures used, as, for example, basing a theory of disease and therapy on subluxation of the spinal vertebrae simply because rubbing the back of the patient makes him feel better.

Physicians are, on the whole, too sparing or else too general with their reassurances to patients. In trying to be scientifically honest they fail to meet the patient's need to be assured of help against the destructive process within him which has aroused his anxiety. They are too contemptuous of physiotherapy—massage, passive exercise, and the like—and have let the cultists exploit this valuable field. People like to be rubbed and massaged, and they often feel much better after such measures are used, but aside from getting a massage from the nurse when bedfast in the hospital, they find it hard to get such soothing procedures prescribed by physicians. They must go to Swedish masseurs, or to osteopaths or chiropractors, or to spas where healing waters are applied internally and externally and a good rub-down is included. Physicians are, on the whole, too uninterested in or too intolerant of the story of his trouble the psychologically sick patient wants to tell. If he is afraid of going to a psychiatrist for fear that will stigmatize him, he must find the sympathetic ear of his minister, or of a Christian Science practitioner, or of a charlatan "adviser" on personal problems. All of these measures should properly be within the realm of scientific medicine. There is no surer way to eliminate unscientific exploitation of them, and thus to eliminate cults.

Cults must be taken seriously by the medical profession, not only in order to combat their encroachments on medical practice, but also, and more especially, to study and understand scientifically the psychological factors which cause people to go to cultists in preference to physicians. In order to progress further toward their scientific goal, physicians must, paradoxically enough, abandon the materialistically scientific attitude which excludes study of emotional factors involved in patients' illnesses and espouse a higher scientific attitude which tries to understand everything about the patient's behavior and feelings in addition to his structure and physiology. When that goal is reached every sufferer, regardless of the unscientific character of his thinking, behavior, and complaints, may expect to find scientific understanding and effective treatment from his physician.

Medicine Today

"Be not the first by whom the new are tried, nor yet the last to lay the old aside."

Mesenteric Adenopathies. According to Parini there are certain acute forms of adenopathies of the mesentery with symptoms simulating those of acute appendicitis and also forms with abscess formation and possible rupture of the abscess and consequent peritonitis. The condition is generally found in children and adolescents, although it may be seen in adults. The enlarged mesenteric lymph nodes can be felt by palpation only in rare cases. The differential diagnosis of mesenteric adenopathies with acute appendicitis is made from the type of pain, which is of an intermittent character and located in the ileocecal or periumbilical region rather than in the appendicular region. The presence of leukocytosis with lymphocytosis is of diagnostic value. Mesenteric adenopathies may be secondary to tuberculosis, chronic inflammation of certain abdominal organs, or else chronic infection of the throat, teeth, respiratory tract or intestine. The treatment is etiologic, namely chemotherapy, especially sulfanilamide, in infection and medical, physical and other treatments in tuberculous adenopathies. In the latter the treatments indicated are administration of iodide, exposure of the patient to sun irradiations, administration of roentgen irradiations, sojourn of the patient in the proper climate and proper diet and general hygiene. Surgical intervention is indicated only in acute forms in the presence of (1) intestinal obstruction or stricture from compression of the enlarged lymph nodes or from adhesions, (2) acute suppuration, especially if there is a menace of rupture of a lymphatic abscess, or (3) peritonitis from rupture of an abscess. It is advisable to establish ample drainage after the operation. It is also advisable to resort to surgical intervention only in the specified conditions mentioned, since removal of enlarged lymph nodes may be followed by production of hemorrhages or development of necrosis, suppuration or formation of adhesions. Five cases of either the tuberculous or the infectious etiology are reported by the author.

—*Archivio Italiano di Chirurgia, Bologna,* **56**:237-338 (May) 1939. Abstracted in *Journal A.M.A.* **113**:21, 1920 (Nov.) 1939.

Editor's note: This abstract is republished in full because it seems that the profession generally are not aware of mesenteric adenopathies constituting a distinct clinical syndrome. It is probable that a more intimate knowledge of this condition would oftentimes make unnecessary an exploratory abdominal operation.

Morphine and Congestive Heart Failure. Despite the frequency with which the opiates are prescribed and administered, certain aspects of the pharmacology of morphine are misunderstood and misinterpreted clinically. There are still some physicians who withhold morphine in the treatment of congestive heart failure and pneumonia for fear of respiratory depression. This may be good pharmacology but it is bad therapeutics. There is, perhaps, no drug which can equal morphine in the treatment of acute congestive failure, particularly if there is associated pain or shock, such as occurs in acute coronary accidents. Nor must the therapeutist be alarmed when the respirations are reduced to 10 or 8 or even 6 breaths to the minute, as long as the circulatory condition of the patient is clinically improved and there is no evidence of disturbance in the interchange of gases.

—Harold T. Hyman, M.D., *Jour. Mount Sinai Hosp.,* **VI**:2, 68-85.

Type 14 Pneumococcus in Children. The Type 14 pneumococcus appears to have its highest incidence and greatest pathogenicity among infants and young children in whom it is the dominant pneumococcal agent of pneumonia. When found in patients of this age group even when associated with other organisms it is usually of etiologic importance in relation to existing pulmonary infection, and it has not been found to occur commonly in the absence of pulmonary infection. As a cause of pneumonia in patients of pre-school age its importance is comparable to that of the Type 1 pneumococcus in adults. . . . Concentrated anti-pneumococcus Type 14 rabbit serum was administered to 34 of the patients, including 22 under two years of age. All the patients who received this form of therapy survived, and all but 3 with complications or mixed infection showed prompt improvement in response to adequate doses.

—Edward C. Curnen, M.D., *New Eng. Jour. Med.* **221**: 19, 725-734.

Vitamin B_1 Therapy. The signs and symptoms attributed to vitamin B_1 deficiency are legion, the most definite being anorexia, fatigue, and a neurological and a circulatory syndrome. Anorexia and fatigue are non-specific. In their presence the possibility of vitamin B_1 deficiency should be considered and confirmatory signs should be sought. When these symptoms occur without supporting objective signs, and do not definitely respond to thiamin therapy within seventy-two hours, they are probably not due to vitamin B_1 deficiency alone.

The neurological manifestations are those of bilateral and symmetrical polyneuritis involving first and predominantly the lower extremities. Peripheral neuritis that involves a single nerve, or that is not bilateral and symmetrical, or that does not involve first and predominantly the lower extremities is, in our experience, probably not due to vitamin B_1 deficiency alone. For such neuritides other etiologic agents should be sought.

—Norman Jolliffe, *Bull. New York Acad. Med.,* July, 1939, page 469.

A CASE OF MENINGOCOCCIC MENINGITIS WITH COMPLICATIONS*

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Muncie

M. J., male, age 26 years. The patient's illness began on July 26th, with an acute pharyngitis, chills and fever as high as 104, and muscular soreness. He was first seen in his home on July 29th, 1935, with complaints of severe, generalized headache, projectile vomiting, and short periods when the patient seemed mentally confused. The patient was seen again on the following day, July 30th, when all signs and symptoms were greatly exaggerated, and the patient was obviously stuporous. Opisthotonos had developed, Babinski's and Kernig's signs were present, and the patellar reflexes were hyperactive. Meningitis was suspected. A lumbar puncture was performed in the home and the spinal fluid was found to be under increased pressure and very cloudy. The patient was immediately hospitalized.

On admission the spinal fluid cell count was found to be 22,400, of which 99 per cent were polymorphonuclear leukocytes. Both direct smears and the culture contained gram negative diplococci resembling meningococcus. A definite diagnosis of meningococcic meningitis was established. The patient entered the hospital on July 30, 1935, and was discharged on September 4, 1935,—a total of 36 hospital days.

Treatment consisted of the administration of meningococcic anti-toxin intra-spinally, intravenously, and intra-muscularly. A total of 289 cc. of anti-toxin was administered during his hospital stay—20 cc. intravenously, 172 cc. intra-spinally or cisternally, and 97 cc. intramuscularly.

The accompanying table gives the course of the patient's spinal fluid cell counts as well as frequent cultures. The highest recorded temperature on each day is also tabulated.

Cisternal as well as lumbar punctures were done daily. A brief summary of the episodes of special interest during the course of the illness is as follows:

On the fourteenth hospital day the patient developed an apparent sensitivity to the serum of the anti-toxin with generalized urticaria. The procedure for desensitization as found in Cecil's[1] "Textbook of Medicine" was instituted, beginning with a minute dose, and gradually increasing the amount, first subcutaneously, then intravenously, and finally intraspinally.

At about this time—fourteenth hospital day—the patient began to complain of a return of the severe, intense headache in spite of low spinal fluid pressure and reduced cell count. Relief from the severe headache was obtained from combined cisternal and lumbar punctures. On the sixteenth hospital day the cell count increased considerably (4,133) with increased pressure which seemed to indicate the presence of a cerebro-spinal block. Again the total cell count was reduced, and cultures became negative for the first time.

On the twenty-first hospital day the patient again complained of the return of the intense headache. Cisternal puncture revealed a low pressure with increased cell count and the culture was positive. This untoward aspect became progressively worse, until on the twenty-fourth hospital day the patient had become irrational, respirations occurred from 12 to 14 per minute, the pulse was irregular and varied from 40 to 56; involuntary defecation and urination occurred. Cisternal puncture showed very low pressure. It was decided that a block was again present, but this time probably at one of the foramina higher than the fourth ventricle. In an effort to break this apparent block we chose to inject air into the spinal canal after the withdrawal of spinal fluid as recommended in the work of Doctor Matthew

Date	*Total cells*	*Temp.*	*% Polys.*	*% Lymphs.*	*Culture*
7-30-35	22,400	101.4	99	1	+
	53,300	99.6	99	1	+
7-31-35	48,000	99.6	99	1	+
8-1	8,044	99.1	99	1	—*
8-2	4,155	100.4	95	5	+
8-3	1,822	100.8	95	5	—
8-4	2,011	102	94	6	—
8-5	4,222	99.6	99	1	—
8-7	755	99.4	99	1	+
8-8	2,211	99	99	1	+
8-9	1,344	99.2	99	1	—
	966	99.4	99	1	+
8-11	555	100	95	1	—
8-12	711	101	99	1	+
8-13	788	99.8	99	1	+
8-14	1,011	100.4	100	0	—
8-15	4,133	99.4	99	1	0
		(chill)			
8-16	977	(103.6)	99	1	—
8-17	1,455	100.4	99	1	—
8-18	655	99.4	99	1	0
8-19	422	99	99	1	—
8-20	3,633	100.6	99	1	+
8-21	3,288	99.2	63	37	—
8-22	677	99	74	26	—
8-23	422	100	46	54	—
8-24	533	98.6	64	36	0
8-25	241	98.8	79	21	0
8-26	247	98.6	74	26	0
8-27	122	98.6	40	60	—
8-28	111	98.6	25	75	—
8-29	100	98.6	2	98	—
8-30	44	98.6	25	75	—
8-31	44	98.6	20	80	—
9-1	22	98.6	25	75	—
9-2	33	98.6	0	100	—
9-4	19	98.6	0	100	—

Tabulation of total and differential cerebro-spinal fluid leukocyte counts and cultures. The highest temperature recorded on each day is also tabulated.

* The days on which no culture was prepared are marked —.

* Case report from records of Ball Memorial Hospital, Muncie, Indiana.

[1] "Procedure of desensitization," Russell L. Cecil, A.B., M.D.: A Text-Book of Medicine, 3rd ed., 1928, Philadelphia. W. B. Saunders Company: Pp. 472.

T. Moore[2] of Philadelphia. The method advocates the injection of a slightly smaller amount of air than spinal fluid removed. For example, if 10 cc. of spinal fluid can be removed, then 8 cc. of air is slowly injected back by means of an ordinary 10 cc. syringe. In this case injection of air was promptly followed by an increased flow of spinal fluid. At the first attempt, following an almost dry cisternal tap, a total of 60 cc. of air was injected into the spinal canal while 80 cc. of spinal fluid was withdrawn. This procedure was repeated the following day. Two days later, on the twenty-seventh hospital day, the patient experienced only a slight headache, vomiting had ceased entirely and he had regained sphincter control. Stereoscopic films of the skull at this time demonstrated the presence of air in the ventricular system. From this time on the spinal fluid cell count diminished daily, the cultures became negative, and the patient continued to a successful recovery with no complicating sequelae. Four years later this patient continues in normal activity with no evidence of central nervous system involvement.

We feel sure that the successful recovery of this patient was due to the injection of air into the spinal canal, thus relieving the cerebro-spinal obstruction and preventing the formation of adhesions and the beginning internal hydrocephalus. While our experience with this procedure is meager, we feel that it can be done without risk to the patient and is worthy of trial in a complication of meningitis such as this.

It will be noted that about the time that there was a definite improvement in the patient's condition there also occurred a shift in the type of white cells found in spinal fluid. The polymorphonuclear cells were gradually replaced by lymphocytes until finally all white cells were reported as lymphocytes. This change, we feel, can be regarded as a favorable sign.

We would call attention to the fact that this case occurred at a time when treatment by antitoxin was comparatively new. At the present time the amount and method of administration would necessarily be altered.

Summary:

1. Epidemic meningococcic meningitis treated by the administration of meningococcic antitoxin by all routes.
2. Complicating factor of serum sensitivity.
3. Complicating factor of cerebro-spinal block which was relieved; first, by combined cisternal and lumbar punctures; second, by the air displacement method.
4. The shift of the type of white cell in the cerebro-spinal fluid from polymorphonuclear to lymphocytes is a favorable sign.

[2] The air-serum displacement method in the treatment of meningococcic meningitis. Matthew T. Moore; Philadelphia: Archives of Pediatrics, Vol. LII, No. 7, July, 1935: Pp. 456-471.

ABSTRACTS

CITE LIMITATIONS OF TREATMENT WITH TESTOSTERONE PROPIONATE

The Administration of Male Sex Hormone For Various Sexual Deficiencies is Evaluated by Chicagoans

The administration of testosterone propionate or male sex hormone represents primarily a treatment which substitutes artificial material for that which the body fails to create in sufficient amounts, in contrast to stimulation with material that causes an overproduction of glandular secretion, W. O. Thompson, M.D., and N. J. Heckel, M.D., Chicago, declare in a discussion of its limitations, published in *The Journal of the American Medical Association* for Dec. 9.

In their summary of the uses of testosterone propionate, the two physicians say that its most important application is in the treatment of persons whose sex glands have been removed or in those undeveloped sexually. Because it may cause a serious reduction in the number of sperm cells in normal men, they say it should not be used when the sex gland is capable of normal function and that it probably has no value in the treatment of sterility. "Its exact value in reviving the sexual, mental and physical vigor of old men is still to be determined," they declare. "In the treatment of inability to function sexually its use is indicated only in those cases in which the natural production of male sex hormone is deficient."

STORAGE OF BLOOD FOR TRANSFUSIONS SHOULD BE LIMITED TO TEN DAYS

A limit of between five and ten days for the use of blood for transfusion, after it has been stored appears to be a safe restriction, due to the less satisfactory or even dangerous results which may follow the use of older blood, *The Journal of the American Medical Association* for Dec. 2 recommends in an editorial.

"The obvious advantages of storing blood for transfusion have led to the adoption of 'blood banks' by many large hospitals throughout the country," the editorial points out. "With regard to results of transfusion, it has been found that there is no difference in the incidence of untoward reactions provided the blood has not been kept too long.

"Investigations indicate that blood more than from a week to ten days old is not equivalent to fresh blood. Indeed, with blood that is too old there is even some danger of blood in the urine and serious symptoms such as are known to result from the transfusion of incompatible blood.

"When the available data are taken into consideration, it is evident that the transfusion of preserved blood has acquired an important role. This is a great change in attitude from the opinion held less than two decades ago, when the transfusion of citrated blood even when fresh was looked at askance. However, there are definite limitations to the use of stored blood which should be taken into account. Pending further investigation, a safe limit to set for the use of such blood would be between five and ten days. Perhaps by improving the method of storing blood it may be possible to extend the time limit."

PAY YOUR 1940 DUES NOW!

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JANUARY, 1940

Editorials

TULAREMIA

For some years past, we have enjoyed a series of articles written by The Old Fisherman in *Outdoor Indiana*, that very much worthwhile publication of the State Department of Conservation. We do not know the identity of The Old Fisherman, but he certainly knows something about the art of fishing and we have come to have much respect for his opinions in that line of sport. However, in a recent article entitled "Missed Years of Raspberry Jam, and He's Not Goin' to Quit Rabbit Huntin'," he hands out a lot of suggestions that should go unheeded by Indiana hunters, for he makes light of a disease which is comparatively new in Indiana yet which takes an increasing toll of human lives each year.

In an original article by Dr. R. E. Mitchell in this issue of THE JOURNAL, the author gives a very clear historical picture of the disease, how it first was recognized in California less than twenty years ago, and how it has spread until now it appears in almost every section of the country. Last year, for the first time, tularemia was reported in the New England states, four cases having been diagnosed in that section.

It is interesting to note the upward curve in the spread of this disease in Indiana since the beginning of 1932 as shown in the accompanying figures from the State Board of Health. We are unable to explain why 1932 showed 17 reported cases and the succeeding three years gave a total of only seven cases. However, beginning in 1936, there was a decided increase in the number of *reported* cases, and there are many cases unreported. In 1937 there was a total of 33 cases; the following year there were 134 cases. (It is surmised that the medical profession, along about this time, became tularemia-conscious and that they had become more familiar with the symptoms of the disease.)

Naturally, the disease is more prevalent during the open hunting season. With 111 reported cases in December of 1938 and 14 additional cases in the following January, most of the local hunting season is covered. It will be interesting to note the number of cases reported for the present season which will end on January tenth.

There are many mistaken ideas on the subject of tularemia. Following the death of a prominent local citizen from this disease, one hears much public comment on the subject. It commonly is believed by the lay public that this is a new disease, for they say, "We never heard about it a few years ago; perhaps our doctors have only recently learned what it is." Of course, the fact that we did not hear of it in Indiana until a few years ago is explained because tularemia had not yet reached us, and Indiana rabbits had not yet become infected. But The Old Fisherman and the Oldest Residents to the contrary, we do have tularemia in Indiana, and it is rapidly increasing. Just a day or two ago, an old-time hunter was in our office and we asked him about his success with his rabbit hunting this year. His reply was to the effect that his gun and his hunting togs were hanging in a closet at his home and that he wanted nothing to do with rabbits "until this scare passes over."

Rabbits can be safely handled, if they are not *too* sick, without danger of infection, and the same may be said of eating them if they are properly cooked—and this means *thoroughly* cooked. A 1938 report from the U. S. Public Health Service made the statement that an infected rabbit, if not thoroughly cooked, was a source of danger; and that if, on breaking the bones, a red fluid exuded therefrom and if that red blood gained entrance into the blood stream via a small break in the skin, one would most likely become infected with tularemia.

We urge our members to familiarize themselves with all phases of the subject and to do their part

REPORTED CASES OF TULAREMIA IN INDIANA

	1932	*1933*	*1934*	*1935*	*1936*	*1937*	*1938*	*1939*
January	9	1	0	0	0	0	6	14
February	0	0	0	0	0	0	2	7
March	0	0	1	0	0	0	0	0
April	0	0	0	0	0	0	2	1
May	0	0	0	0	0	0	2	2
June	0	0	0	0	0	0	2	0
July	0	0	0	0	0	0	1	0
August	0	0	0	0	0	0	0	0
September	0	0	1	0	0	0	0	2
October	0	0	0	0	0	1	0	6
November	1	0	0	0	0	4	8	6
December	7	0	2	2	13	28	111	
	17	1	4	2	13	33	134	38
Deaths	5	2	3	4	0	1	6	2

in disseminating this information to their patients. At the present time, the treatment of tularemia seems rather unsatisfactory, though the death rate is not high, for in the 134 cases reported for 1938, there were six deaths.

THE JOURNAL will be pleased to have case reports from our members detailing the mode of infection, the temperature curve, and any other clinical information regarding cases they may have observed during the present hunting season.

A DOCTOR IN THE CABINET?

The advisability of having a Federal Department of Health headed by a physician who is a member of the Cabinet probably will be one of the most important questions to come before the House of Delegates at the annual session of the American Medical Association in New York next June. This question has been discussed from time to time in the past and comes to the fore once again as a result of the first paragraph in the recently issued eight-point platform of the American Medical Association which is as follows:

The American Medical Association advocates the establishment of an agency of federal government under which shall be coordinated and administered all medical and health functions of the federal government exclusive of those of the Army and Navy.

Now come two leaders of American Medicine from West Virginia—Dr. Walter E. Vest, retiring president of the Southern Medical Association, and Dr. James R. Bloss, a member of the Board of Trustees of the American Medical Association—who started a movement at the recent session of the Southern Medical Association to have a doctor in the Cabinet. In his presidential address, Dr. Vest advocated a "physician member of the President's Cabinet and supported by an agency analogous to the Reconstruction Finance Corporation." He further said:

> "No new Federal agencies are necessary for the extension of present Federal health services, but increased appropriations are needed. Sufficient funds should be made available to care properly for the indigent, using existing hospital facilities and the private practitioner wherever possible. Recognition of the principle of demonstrated need should be rigidly adhered to and due regard for a balanced budget should be had. Matching of funds appropriated by states would seem of doubtful wisdom because of varying health and fiscal needs.
>
> "An appropriation to a Federal agency to which an individual state in need of funds for medical and health purposes could apply, demonstrate its need and secure the necessary money, with or without matching, according to the terms of the appropriation, certainly would meet the need. An agency analogous to the Reconstruction Finance Corporation would suffice, or the appropriated funds might be allocated by the United States Public Health Service.
>
> "A final principle which should be recognized in any national health legislation is the fact that the medical profession is the only segment of our population which has the training and experience necessary to advise upon and direct the health and medical activties of the country . . . and should, therefore, be consulted in the planning and development of all programs involving health and medical care.
>
> "The challenge now facing the medical profession is to enunciate a sensible health program for the country and work for its adoption," Dr. Vest maintained. Such a program must provide time for its development and must be 'evolutionary, not revolutionary.'
>
> "The key point in such a program should be the establishment of a Federal Department of Health, the secretary of which must be a doctor of medicine with a seat in the President's Cabinet."

Doctor Bloss pointed out, at a medical economics round table discussion held at the time of the convention, that more than twenty different and distinct federal health agencies exist at the present time, carrying a budget of $142,597,624. "Solely as a matter of efficiency and economy, these all should be cared for by one department of government unifying all," said Dr. Bloss who also said that the sum budgeted for these various agencies exceeds the combined budgets in the Departments of Commerce, Justice, Labor, and State.

THE MOST USED PROPHYLACTIC AND THERAPEUTIC AGENT

What drug or what substance is it that a doctor prescribes oftenest? An interesting subject for speculation! If we should finally determine that this reagent was possibly digitalis or aspirin, it would be reasonable to suppose that the doctors who so frequently prescribe these remedial agents would be greatly interested in the purity of the composition, the manner of the assay and the methods by which they were made available to the profession and to the public. Without attempting to cite statistics in the matter, we believe that it is not digitalis or any other drug in the usual sense of the word that is prescribed most often, but that probably *milk* is mentioned oftener by the doctor than any other remedial agent with possibly water and certain foods in second and third places.

In Indiana, the number of persons per physician numbers something like 1,000. Let us picture a typical homogeneous group of 1,000 people. Of this number a very considerable percentage are babies who must depend on milk. An even larger

number are pre-school children who should use a great deal of milk. As a matter of fact, nearly everyone in the group uses milk at some time or other. This milk is usually good but it may be dangerous unless high standards are maintained. Then there are a number of special groups who need milk—those who are undernourished, those who have tuberculosis, those who have kidney disorders and intestinal troubles. The use of milk as a food for old people and expectant and nursing mothers, for those suffering from gastric and duodenal ulcers, for those suffering from insomnia —all these are well-established medical practice.

Probably next in importance is water. How often do we tell the patient to drink a great deal of water! And how often are diseases caused by bad water! After water probably come certain foods. We prescribe eggs, orange juice, crisp bacon, or what not.

Such being the case, it surely is not too much to ask of doctors that they shall be interested in the standards required in their particular neighborhood for the purity of milk and water supplies. They should know the advantages of pasteurization and homogenization of milk. They should know whether there is any real advantage in goat's milk, and the merits of the various other forms of milk which are on the market. For example, there is the question as to whether there is any objection to giving a chocolate milk drink to a child who does not like white milk, and there is also the question of the various uses of artificially soured milk, such as cultured buttermilk. Similar questions can be asked about water standards and food standards, but this article is intended merely to call these matters to the attention of the reader so that he may be stimulated to further questioning on these matters.

If it is true that milk, water and food are our most important prophylactic and therapeutic agents, it does seem as if we doctors ought to know more about them.

THE TEACHING OF THERAPY

During the period when THE JOURNAL was "surveying" itself, we received a comment from one of our active members that we deem worthy of more than casual consideration. Among several remarks in answer to our question as to improving the magazine, he mentioned "shortening a number of the original articles, because they are usually copies!" Again he says, "I would like to see more original articles by men of experience and not so many by the highly theoretical cubs; after all, facts are what we crave and not some crack-brained theory that changes in a few days." Then he wrote the matter that prompts this editorial, which we quote: "I would also like to see a campaign instituted by THE JOURNAL and the University School of Medicine to give our boys who are the doctors of the future something tangible in the art of the use of drugs in the practice of medicine. It surely is a pity to hear these medical students, about to enter general practice, wanting to know what drugs they are going to use, because the knowledge they should have at this time is surely lacking. What is the cause of all this? Is it because these so-called specialists want them to bring all their patients in for consultation and let *them* prescribe the proper remedies and still further commercialize medicine, or do the men responsible for this sad state of affairs wish the new medical men to get all their instructions from the drug house detail men? We are all wondering."

Thus goes the letter from a country practitioner, a man whom we know well, a man who is very active in Association affairs and who recently headed one of the most important reference committees. He brings up questions that are hard to answer. We believe he is correct in his statement that the subject of therapeutics is not taught as thoroughly as in former years. For many years we prepared questions on this subject for the annual State Medical Board examinations and each year were criticized because one or two of our questions concerned drugs then commonly used, but about which the applicants were wholly ignorant.

The modern chemical, pharmaceutical and biological laboratories are carrying on vast experiments, continually bringing forth new products, many of which are valuable additions to our armamentarium, but we continue to maintain that many of the old drugs are efficacious in the management of disease and that they should be given a high place in the modern teaching of therapy.

It is, of course, questionable as to whether or not modern medical students should be taught pharmacology such as we were taught some forty years ago when we were compelled to know the origin and method of preparation of practically every drug in use at that time, but we do believe that a little time spent in the study of the useful drugs would be of much benefit to the modern medical student.

The American Medical Association puts out a little booklet called "Useful Drugs." Some time ago we showed the book to several internes, asking them to point out the drugs with which they were unfamiliar, and the number so designated was astounding. Therapeutics should be taught, not as it was taught back in "our day," perhaps, but nevertheless taught!

DUES ARE DUE!

Editorial Notes

100% PAID UP MEMBERSHIP FOR 1940

1. **Sullivan County (Dr. James B. Maple, Secretary).**
2. **What county will be next?**

This is to remind you that the prenatal law becomes effective on January 1, 1940. The marriage law becomes effective on March 1, 1940. Both laws are published in full in this issue. It would be well to make yourself familiar with them.

From Anderson, Indiana, we have received a manuscript entitled "Polysurgical Addiction" which apparently is submitted for publication in THE JOURNAL. The envelope carried no return address and the paper is unidentified. Does anybody know who the author is?

Speaking of the editors' dinner, annually held in connection with the Secretaries-Editors Conference, Secretary-Editor Brooksher, of Arkansas, quaintly remarks, "In the evening to the editors' dinner, this function having grown to include ninety-three editors and it would seem that many a secretary and other camp follower became an editor for this function." As a matter of fact, there was a considerable increase in attendance over previous years, presumably because a number of those attending the more formal sessions wished to mingle with the purveyors of medical news in a more intimate fashion.

In the recent death of Allan J. Hruby, secretary and trustee of the Chicago Municipal Tuberculosis Sanitarium, the medical profession has lost one of its greatest authorities in matters concerning tuberculosis. He was nationally known as one of the great leaders in the fight against this common enemy, devoting his entire attention to the eradication of the disease. For many years he was superintendent of the institution with which he was associated and after retiring from that post he continued in the capacity of secretary. Those who read his testimony in the suit filed against Dr. Morris Fishbein by an arch tuberculosis quack, down in Texas, will recall the clarity with which Dr. Hruby expressed his opinions as to the treatment of tuberculosis; his testimony undoubtedly had much to do with the favorable outcome of the case.

The Annual Congress of Industrial Health, sponsored by the American Medical Association, will be held in the Palmer House, Chicago, January 15-16. The major subjects to be discussed are Syphilis in Industry, Physical Examinations and Disability Evaluations, these topics to be presented by physicians who are eminently qualified to speak thereon. A feature of the two-day program that will appeal to many is the informal dinner session on Monday, January 15th, at which time a round table discussion of plans for organization and for future activities will be held and to which all state and county society committees on industrial health are especially invited. As pointed out in a recent editorial in THE JOURNAL, industrial health has come to be a very live topic and this meeting will afford opportunity to "tune in" on the latest developments in this pioneer field.

Up to the time of this writing Ole Man Winter has dealt kindly with Hoosier folk. We have had a most delightful fall and early winter. We of the Calumet region have had two distinct "Indian Summers" and until a day or two ago it looked as if we might have a third. So, no matter what the weather man has in store for us during the next two months, we shall not complain; we have enjoyed the last three months immensely. Somehow, after Christmas, it seems that the weeks and months roll rapidly along; we think of the mid-winter Council session, the Secretaries Conference, the Post-Graduate Week, then comes the round of district meetings and in no time at all we are planning the trip to that most beautiful section of our state, the foothills of the Cumberlands and French Lick, the choicest spot for our annual get-togethers in all Indiana.

Indiana medicine lost one of its most devoted admirers in the passing of William Herschell, poet and feature writer for the Indianapolis *News*. "Bill" Herschell believed in the Hoosier doctors; he knew 'em and he liked 'em. It was our privilege, a few years ago, to become well acquainted with this delightful raconteur, this at the time he was assigned to cover a French Lick session of our State Association. We spent many hours with Bill during that meeting, finding him a most entertaining chap. He liked "folk," as he termed them; wanted to know them, to get their reactions to this and to that. He loved everything that bloomed, going out of his way, one day, to show a Jamestown weed, in bloom. (We both called 'em "Jimsum weeds.") Yes, we liked Herschell and are glad to have known him even for a short time.

Health officials from Wisconsin, Kentucky, Michigan, Ohio and Indiana recenty held a conference in Indianapolis relative to some late changes in regulations concerning the sale of foods, drugs and

cosmetics. Indiana has a new law covering certain phases of this subject, certain provisions of which are now in effect, all to be effective after March first. Under the new law the advertising and sale of certain of these commodities is to be rather severely restricted, particularly in relation to drugs. The indiscriminate sale of drugs presumed to be effective in the treatment of some fourscore illnesses will be barred, it is said. All of which is a move in the right direction, since too many potent and even lethal drugs are to be had for the asking. It now remains to be seen what will be done to regulate and control the blah-blah of the radio patent and proprietary medicine boosters.

Press reports are to the effect that a committee of citizens, physicians and public officials has been organized in New York City to see what can be done to assist some 400 American medical students who are presently enrolled in foreign medical schools, but because of war conditions find it impossible to return thereto, in order that they may complete their studies. This brings up a problem of much interest. We often have commented upon the number of American boys who matriculate in the various foreign schools, even making bold to suggest that many of them have done so after having been unable to gain entrance into the schools of this country. Just what can be done by this committee, or anyone else for that matter, is beyond us; certain it is that our medical schools have complete quotas of students and it would seem impossible to take on any considerable number of the 400 students, even if it were deemed wise to do so.

February first is named as the day for the observance of the Fourth National Social Hygiene Day and again does syphilis serve as the feature for the topic of discussion for that event. *Syphilis* —the word that was used only in low whispers and never in "polite" society; the word that never was seen in news stories in our papers; the word that until less than two years ago was barred from our broadcasting stations, now has become a much discussed subject. The American public, in the past few years, has become syphilis-conscious; that public knows of the ravages of the disease, knows of its prevalence throughout the civilized world, and *knows that syphilis can be cured.* We strongly recommend that our component societies observe National Social Hygiene Day in some manner. See to it that your public is told of that event and, if possible, have one or more addresses on the subject before lay groups in your own community. This is one of the "days" in which we strongly believe!

Oculists should be on the lookout for a man who is traveling through the country buying glasses, especially from oculists, to whom he usually gives a check in the amount of thirty dollars. The man poses as a farmer and usually has a notation on the check that it is for corn, cows, hogs, etc. The checks are forgeries both as to original signature and endorsement signature. The man is about five feet nine inches, looks tall, weighs about 155 pounds, has light sandy hair, blue eyes, is smooth shaven, has a ruddy complexion and appears to be about 49 years old. He has been successful in several instances in Missouri, once even obtaining a physician's personal check for the difference in the cost of glasses and the thirty-dollar check offered. Since he has appeared in numerous places, it is not unlikely that he may work in Indiana sooner or later. It is much easier to have your bank verify the authenticity of a check than it is to have the sheriff find the swindler. It is still easier to refuse such checks unless you are acquainted with the patient.

Probably several of our members have received a letter similar to the one that came to us today from the publisher of one of the "throw away" magazines. The letter expresses an immediate concern as to what soap should be used for the bathing of babies. At the bottom of the letter there are three definite questions which one is asked to answer. The letter carries the information that a signature is not required, hence one's name will not be used in any manner. No explanation is given as to the use that might be made of such information, though it is patent that the publisher does not expect to lose by the venture. It strongly reminds us that but a few years ago a cigarette manufacturer was said to have had an endorsement of his product from several thousand physicians, solely because a carton of cigarettes was sent out with the questionnaire. For more than a year our radios blatantly advised the listening audience that this must indeed be a good cigarette, because twenty thousand doctors said so. Our suggestion is that no attention be paid to the soap questions.

We long have maintained that the greatest single factor in the solution of the automotive accident problem is the matter of the enforcement of existing traffic laws and regulations; further, that the drunken driver is ever a menace on our streets and highways and that drastic action is the only way to control such a menace. So it is with considerable personal satisfaction that we read of the activity of Judge Long, of the Bartholomew County Circuit Court, in the handling of these offenders. He is

quoted as saying "A twenty-five-dollar fine and the loss of one's driver's license for a year is a reasonable penalty for an ordinary case. We can best serve the public by keeping the drunken drivers off the public highways." During the first eleven months of 1939 some sixty-six alleged drunken drivers have appeared before Judge Long; sixty-three of this number were convicted, and of these sixty-one were deprived of their license. In contrast we might refer to an Indiana city court in which one driver appeared a half-dozen times on similar charges, only to escape punishment by way of the various "legal technicalities" so well known to a few attorneys who know all the tricks of the trade.

At the risk of being chastened for talking *too* much about our local county medical society, we'd like to tell you a bit as to what went on during the first year of our "noble experiment," that of employing a full-time, lay secretary. Most of our members felt that for the first year, what with an increase in annual dues from *ten* dollars to *forty* dollars, our membership would take quite a drop, the estimates ranging from twenty to forty members. Here are the figures: On December 31, 1938, our paid membership was 227; on December 31, 1939, *we show a membership of 234!* We ourselves can hardly credit this, but Henry Waterson, the go-getting, make-'em-all-work secretary, declares this is the correct number. We have fifty-five working committees—and they really work. We have four branch societies, this because of the geographical distribution of our members, and two business bureaus in full operation. These latter institutions not only look after collections and credit ratings, but arrange meetings for our office secretaries, where they are taught the finer points of office management and the handling of patients. We have the most friendly relation with our township trustees and our indigent population, numbering thousands, has an almost universal free choice of physicians. Our Council has come to be just about the busiest medical group in all Indiana and has definitely cleared up many problems that long have given us plenty of trouble. Medical Lake County is coming along, thank you, and one of these days we trust we may again be regarded as being a part of Indiana!

Again does Indiana head the list in the matter of production of the finest tomatoes in the land. On several occasions in the past few weeks we have noted advertisements of canned goods under the names of our highest class grocers, directing attention to "Indiana tomatoes." We stand first in the production of that delectable pre-breakfast drink, tomato juice, both as to quantity and quality. However, the chiselers, always ready to take the slightest advantage, are attempting to "muscle in" on the tomato industry of our state. In the November *Bulletin* of the Indiana State Board of Health is found the information that tomato products (canned juice and pulp) have been confiscated by the Board to the extent of 100 gallons of juice, 161 No. 2 cans and 26,128 gallons of pulp, all of which has been held as not fit for human consumption. In another section of the same *Bulletin* is the information that 530 samples of juice, catsup, paste and pulp were below the Board standards. Aside from showing a highly efficient State Board of Health, the above figures offer a sad commentary on a few of our Hoosier folk who are not content unless they are cheating, even though in that cheating they are endangering human life and at the same time jeopardizing the reputation of the "Hoosier love apple."

In the Student Section of *The Journal of the A. M. A.* for November 25th appears an article worthy of the attention of all physicians, "a study of the attitudes, personality, social fitness, adaptability, character and motivations of medical students." The study was made by Mr. Norman R. Fielder, program director, West Side Professional Schools Dept., Y. M. C. A. There were 43 questions included in the list sent to all medical students in the country and 3,200 different students sent in the completed questionnaire. The questions seem to have run the entire gamut, from race, color, and religion, to some very personal ones. From a study of the report it would seem that the questions were very frankly met and answered. Of course there was the universal question as to why the student wanted to be a doctor. Taste was responsible for some 30%, aptitude for about 9% and 49% gave "opportunity for service" as the answer. Forty-six per cent had a hobby, photography being the most commonly mentioned. *Reader's Digest* and *Life* magazines afforded a pleasant diversion for those who liked to read. Asked about the "honor" system, 21% thought it would work out, the 79% being most certain that it would not. Twenty-two percent believed in mercy deaths for the incurable. As to racial prejudice, 22% are prejudiced against Jews, 6% against Gentiles; 80% would date a person of a different race, while 95% would not marry one. Only 10% favored women smoking! 88% preferred the modern woman to the old fashioned type; 93% believed women are the mental equals of men; 98% believe in God, but only 15% attend church regularly. To one who is interested in what goes on in the minds of a large group of professional school students, this article will afford an hour or more of pleasant study.

President's Page

ARE YOU GETTING YOUR MONEY'S WORTH?

More responsibilities, both to the people of Indiana and to the profession of the state, probably will be placed upon the officers and the committees of the Indiana State Medical Association during 1940 than ever before. Hence, in taking over the presidency, I realize deeply the seriousness and gravity of the position. However, no matter what may happen or what turn world or national events may take, I am confident that as far as we are concerned in Indiana, the profession is in the best possible position to meet the obligations placed upon it by society, the challenges of our foes, and the hopes of our friends. This confidence is due to the sound foundation of our organization established under the direction of my predecessors.

To re-enforce this firm foundation rather than to strain and perhaps over-reach ourselves in attempting to attain any great new heights involving supposedly romantic and mysterious health plans will be the guiding purpose of my administration. The best way to re-enforce the present foundation and strengthen the medical organization is at the base—which means that we need every individual physician who is eligible to be a member of the Indiana State Medical Association in 1940. We also need his active cooperation and thoughtful consideration of all our problems. All suggestions and criticisms, both constructive and otherwise, will be appreciated and given careful consideration.

This, of course, brings up the three-dollar increase in state dues which in turn brings up the question, "What does the individual doctor get for his money?" Here are some of the things that he gets:

1. Membership in his county, state, and national medical associations.
2. Defense for himself and his good name against malpractice suits.
3. A monthly journal which rates as one of the leading medical publications in the country.
4. The services of nine standing and twenty-eight special committees—a total of thirty-seven busy, functioning groups of the state association representing him, guarding his interests, and fighting his battles on the numerous medical and economic and political fronts upon which attacks are constantly being made in our present strenuous and struggling world. These committees do things and accomplish results in the interests of the individual doctor which no one man, no matter how strong physically or how brilliant and talented intellectually, could do alone.
5. A full-time well staffed headquarters office through which the committees function, and their work is correlated, and upon which you or your society may always call for information or aid.
6. An annual scientific meeting which rates as one of the best state gatherings in the country.
7. Tacit acceptance by insurance companies, commercial firms, and the general public that a physician because of his membership is reputable and qualified.
8. Only method by which a doctor may be eligible for any of the leading special societies and postgraduate courses.
9. Finally, there are so many of those intangible but nevertheless worth while benefits coming from membership in the Indiana State Medical Association, all of which may be summed up probably more truly for those who practice the healing art than in almost any other pursuit, in the statement, "A man is best known by the company he keeps."

A comparison between dues paid by the physicians of Indiana and dues paid by members of state medical societies of relative size is very interesting:

	Number of Members	*Dues*
Indiana	3124	$ 10.00
Iowa	2371	10.00
Michigan	3941	12.00
Minnesota	2346	15.00
Missouri	3212	8.00
New Jersey	3700	15.00
Texas	4137	9.00
Wisconsin	2375	15.00

From this you can see that we in Indiana are not paying as much as do the members of most state associations comparable in size to ours, and, by and large, that we certainly do get our money's worth.

Karl R. Ruckell

SECRETARIES' ANNUAL CONFERENCE

Sunday, January 21, 1940

Ballroom, Tenth Floor, Columbia Club

Indianapolis

PROGRAM

1:00 p. m.—Call to order and opening remarks by R. L. Hane, M. D., Fort Wayne, chairman.

1:10 p. m.—Welcome to secretaries by Karl R. Ruddell, M. D., Indianapolis, president, Indiana State Medical Association.

1:15 p. m.—"Postgraduate Medical Education in Oklahoma," Henry H. Turner, M. D., Oklahoma City, chairman, Committee on Postgraduate Education, Oklahoma State Medical Association.



Dr. Peter Irving



Dr. H. H. Turner

1:35 p. m.—Discussion — Howard B. Mettel, M. D., Indianapolis, Chief, Bureau of Maternal and Child-Health, Indiana State Board of Health.

1:45 p. m.—"Attendance at Medical Society Meetings," S. J. Donovan, M. D., Michigan City, secretary, LaPorte County Medical Society. (Discussion.)

2:00 p. m.—"Hospital Insurance and Medical Indemnity," Peter Irving, M. D., New York, secretary, Medical Society of the State of New York.

2:30 p. m.—General discussion.

2:45 p. m.—Rest period.

3:00 p. m.—Symposium by executive secretaries of county medical societies:

R. W. Waterson, executive secretary, Lake County Medical Society, Hammond (10 minutes).

Paul Waddell, South Bend, executive secretary, St. Joseph County Medical Society (10 minutes).

3:30 p. m.—"A Report on Hospital Insurance," A. M. Mitchell, M. D., Terre Haute, president-elect, Indiana State Medical Association.

3:45 p. m.—"Legislative Review and Discussion of H. B. 74," Norman M. Beatty, M. D., Indianapolis, and J. William Wright, M. D., Indianapolis, co-chairmen, Committee on Public Policy and Legislation of the Indiana State Medical Association.

3:55 p. m.—"THE JOURNAL of the Indiana State Medical Association," E. M. Shanklin, M. D., Hammond, editor.

4:05 p. m.—"We," M. A. Austin, M.D., Anderson, chairman of the Council of the Indiana State Medical Association.

4:15 p. m.—"How the Executive Committee Functions," Cleon A. Nafe, M. D., Indianapolis, chairman, Executive Committee, Indiana State Medical Association.

4:25 p. m.—"Legal Matters," Albert Stump, Indianapolis, attorney for the Indiana State Medical Association.

4:35 p. m.—Election of chairman for 1940.

4:40 p. m.—Round table.

Discussion topics:

"Annual Registration of Physicians."

"Taxes which the Physician Must Pay."

"Group Accident and Health Insurance for Medical Societies."

"When and How to Transact Routine Society Business."

6:30 p. m.—Dinner.

Principal speaker—Senator James E. Murray, Butte, Montana, United States Senator from Montana, and Chairman of the Senate Sub-Committee which is considering the Wagner Bill.

THE PRENATAL AND MARRIAGE LAWS EFFECTIVE THIS YEAR

This month there will go into effect the prenatal law which is quoted below. On March first of this year, the marriage law will go into effect; it is given in full in this article, also. One of the things that physicians are asking about in reference to the prenatal law is in regard to approval of laboratories, as provided by law. The State Board of Health has been considering this problem, and laboratory approvals will be given some time during the month of February.

The laws are as follows:

PRENATAL LAW

Effective January 1, 1940

Chapter 12, Acts of 1939

Physicians' Test of Pregnant Women for Syphilis—Duties—Definitions.

SECTION 1. Be it enacted by the General Assembly of the State of Indiana, That every physician attending pregnant women in the state shall, in the case of every woman so attended, take or cause to be taken a sample of blood of such woman, at the time of diagnosis, and submit such sample to an approved laboratory for a standard serological test for syphilis. Every other person permitted by law to attend such pregnant women in the state but not permitted by law to take blood specimens, shall cause a sample of the blood of such pregnant woman to be taken by a duly licensed physician and submitted to an approved laboratory for a standard serological test for syphilis. The term "approved laboratory" means a laboratory approved for this purpose by both the State Board of Health and the pathology department of Indiana University. A standard serological test for syphilis is one recognized as such by the State Board of Health.

Physicians Reporting Births or Stillbirths—Duties.

SECTION 2. In reporting every birth and stillbirth, physicians and others required to report births and stillbirths shall, on and after January first, nineteen hundred and forty, state on the birth certificate or stillbirth certificate, as the case may be, whether a blood test for syphilis has been made during such pregnancy upon a specimen of blood taken from the woman who bore the child for which a birth or stillbirth certificate is filed. If such test has been made during pregnancy, those required to report births and stillbirths shall state the date on which the test was made. In addition to the information now provided by law to be contained in each certificate of birth or stillbirth, every certificate of birth shall state whether such test was made during pregnancy or at delivery, and in case where no blood test has been made, such fact shall be reported together with the reason why such test has not been taken in compliance with the provisions of Section 1 of this act. In no case shall any such certificate state the result of any such test.

Exceptions:

SECTION 3. None of the provisions of this act shall apply to any person who administers to or treats the sick or suffering by spiritual means or prayer, nor to any person who, because of her religious belief, in good faith selects and depends upon such spiritual means or prayer for the treatment or cure of disease.

MARRIAGE LAW

Effective March 1, 1940

Chapter 100, Acts of 1939

(H. B. 134. Approved March 9, 1939)

AN ACT to amend Section 4 of an act entitled "An Act declaratory of the law of marriages, and enforcing the provisions thereof by proper penalties," approved March 5, 1852, and adding thereto a supplemental section numbered 14.

SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF INDIANA, That Section 4 of the above entitled act be amended to read as follows: Section 4. Before any persons, shall be joined in marriage, they shall produce a license from the clerk of the circuit court of the county in which application for such license is made, directed to any person empowered by law to solemnize marriages, and authorizing him to join together the persons named thereon as husband and wife. Such license, if applied for on or after the day this section as hereby amended takes effect, shall be authority at any time within sixty days after its issuance to any person empowered by law to solemnize marriage, to unite such persons in marriage; and if such license was issued prior to the day this section as hereby amended takes effect, such sixty day period shall begin to run upon the date of the becoming effective of this Act, and if such license for the performance of any marriage ceremony is not, within such period, delivered to and acted upon by a person empowered by law to unite such persons in marriage, then it shall be deemed to have expired and shall be of no force or effect.

SECTION 2. That the above entitled act be further amended by adding thereto a supplemental section to read as follows: Section 14. (1) No application for a marriage license shall be accepted by the clerk of the circuit court unless accompanied by or unless there shall have been filed with him a statement or statements signed by a duly licensed physician that each applicant has been given such examination including a standard serological test as may be necessary for the discovery of syphilis made on a day specified in the statement which shall be not more than the thirtieth day prior to

that on which the license is applied for, and that in the opinion of the physician the person thereon named is not infected with syphilis or if so affected, is not in the stage of that disease whereby it is communicable at such time. Any such blood test shall be performed in the laboratory of the State Board of Health of the State of Indiana or in a laboratory or laboratories meeting standards prescribed by the pathology department of Indiana University School of Medicine and approved by the Indiana State Board of Health.

(2) Because of emergency or other causes shown by affidavit or other proof, the judge of the Circuit Court of the county in which the application for such license is made, on joint application of both of the parties desiring the marriage license, shall without the intervention of a jury, in court or in chambers, during the term or in vacation, if satisfied that the public welfare and health will not be injuriously affected thereby, make an order, in his discretion, dispensing with the requirements of subdivision one of this section as to either or both of the parties, including the laboratory statement specified below, or, in the event the statement or statements provided for by such subdivisions have been filed, then by extending the thirty day period following the examination and test to not later than a day specified, which, however, shall be not more than ninety days after such examination and test. The order shall be accompanied by a memorandum in writing by the judge reciting the reasons for granting the order. In case of pregnancy, such judge may order the issuing of such license after the blood test and the physician's certificate has been exhibited to him. Application for such extension may be made before, on or after the expiration of such thirty day period. Such order, and the accompanying memorandum, shall be filed with the clerk of the Circuit Court of such county and he shall then accept and consider such application for such marriage license without the production or filing of any of the physician's statements dispensed with by this order, or shall accept and consider the application within such extended period, as the case may be. The clerk of the Circuit Court shall hold such memorandum of the judge in absolute confidence and the same shall not be considered as a public record, and all communications with reference thereto shall be construed to be privileged communications.

(3) Each such physician's statement shall be accompanied by a statement from the person in charge of the laboratory making the test, or from any other person authorized by such person to make such statement, setting forth the name of the test, the date it was completed and the name and address of each person whose blood was tested, but not stating the results of the test. The physician's statement and laboratory statement shall be on the same form sheet. Upon a separate form a detailed report of the laboratory test, showing the result of the test, shall be transmitted by the United States mails to the physician, who, after examining it, shall file it with the State Board of Health, and it shall be held in absolute confidence and shall not be open to public inspection: Provided, That it shall be produced for evidence at any trial or proceeding in any court of competent jurisdiction, involving issues pertaining only to said marriage contract on an order of the judge of such court requiring its production and shall not be competent as evidence in any trial or proceeding in which said marriage contract is not involved.

(4) A standard serological test shall be a laboratory test for syphilis approved by the State Board of Health and shall be performed as provided for in this act. All laboratory specimens for such tests shall be transmitted by such physicians to the laboratories through the United States mail.

(5) Any applicant for marriage license, any physician or any representative of a laboratory who shall misrepresent any of the facts required by such physician's statement and such laboratory statement or report, or any licensing officer who shall have reason to believe that any of the facts have been misrepresented and shall nevertheless in such case issue a marriage license, or any official or employee who shall not hold the laboratory record confidential except as provided in subdivision three hereof with respect to its production for evidence, or any clerk of a Circuit Court or any deputy or employee of any such clerk who shall not hold in strictest confidence the statement filed with him as to the reasons for the granting of an order under subdivision two shall be guilty of a misdemeanor and shall be punished by a fine of not more than one hundred dollars to which may be added imprisonment not exceeding six months.

(6) Nothing in this section shall impair or affect existing laws, regulations or codes made by authority of law, relative to the reporting of cases of syphilis discovered by physicians, nor shall any person who has taken such test be compelled to submit to any medical treatment when such person objects to the same on religious grounds and who, in good faith, selects and depends upon spiritual means or prayer for the treatment or cure of disease.

(7) The State Board of Health is hereby given authority to make rules and regulations for the administration of the provision of this act as amended and the State Board of Health in conjunction with the pathology department of the Indiana University School of Medicine is hereby given authority to fix standards and to grant approval to laboratories performing such blood tests and other laboratory tests of a public health nature.

SECTION 3. The provisions of this Act shall be in full force and effect from and after March 1, 1940.

TIME TO FILE YOUR INCOME TAX REPORT

A MESSAGE FROM WILL H. SMITH, UNITED STATES COLLECTOR OF INTERNAL REVENUE FOR THE DISTRICT OF INDIANA

This is a message to the professional man with respect to the filing of his Federal Income Tax return for the year 1939.

Before preparing the return, study carefully the instructions on the form; assemble the data for filing the return early, and keep all memoranda after the return is prepared; give full explanation in order that an intelligent audit may be made.

For your own interest, and to avoid congestion in the collector's office, do not wait until the last day of the filing period, March 15, 1940, to file your return. It is just as vital to file your income tax return early as it is to mail your Christmas parcels early. Read carefully the instructions upon the return form itself. *If you are in doubt, call at the Internal Revenue Office on the third floor of the Post Office Building, Indianapolis,* or at any of the branch offices located in the following cities: Gary, Hammond, South Bend, Fort Wayne, Logansport, Lafayette, Marion, Anderson, Muncie, East Chicago, Terre Haute, Evansville, New Albany, or Lawrenceburg. A taxpayer who will give the preparation of his income-tax return the utmost care and secure advice from the offices of the collectors on points about which he is doubtful will render the greatest aid to himself and his Government, for he will thus make the most accurate income-tax return of which he is capable. You are aiding the Government to reduce costs when you take all possible precautions to file an early and accurate return.

WHO MUST FILE A RETURN? The following individuals shall each make under oath a return stating specifically the items of gross income and the deductions and credits allowable: (1) Every individual having a net income for the taxable year of $1,000 or over, if single, or if married and not living with husband or wife; (2) every individual having a net income for the taxable year of $2,500 or over, if married and living with husband or wife; and (3) every individual having a gross income for the taxable year of $5,000 or over, regardless of the amount of his net income. If a husband and wife living together have an aggregate net income for the taxable year of $2,500 or over, or an aggregate gross income for such year of $5,000 or over, each shall make a return, or the income of each shall be included in a single joint return, in which case the tax shall be computed on the aggregate income. Divorcees and persons separated by mutual consent are classed as single persons for the purpose of the income-tax law. In the returns of married persons there must be included the earnings of dependent minor children, unless children have been emancipated. Farmers should use Form 1040 and attach thereto Farm Schedule Form 1040-F. Forms may be secured by writing the Collector of Internal Revenue, third floor of the Post Office Building, Indianapolis.

Husband and wife living together may each make a separate return of the income of each, or their income may be included in a single joint return. If separate returns are filed, neither may report income which belongs to the other, but must report only the income which belongs to each. If a joint return is filed, such return is treated as the return of a taxable unit and the income disclosed is subject to both the normal tax and the surtax, the latter applying to surtax net incomes in excess of $4,000. Therefore, if the aggregate net income of husband and wife exceeds $4,000 plus the personal exemption and credit for dependents to which they are entitled, it is obviously to their interest to file separate returns.

The exemptions are $1,000 for single persons and $2,500 for married persons living together. Also, a taxpayer is allowed a credit of $400 for each person dependent upon him or her for chief support, if such person is under 18 years of age or incapable of self-support because mentally or physically defective.

DEDUCTIONS FOR PROFESSIONAL EXPENSES: A professional man may deduct all necessary expenses incurred in the pursuit of his profession. These include the cost of supplies used in his practice, office rent, cost of light, water, fuel, and telephone in his office, the hire of office assistants, and expenses paid in the operation and repair of an automobile, based upon the proportion of time it is used in making professional calls or for other professional purposes.

Many physicians use their residences both as their offices and their homes. In such instance the physician may deduct as a business expense the rental value of the rooms occupied for office purposes if he actually pays rent, and also the light and heat furnished these rooms. Also, he may deduct a portion of the wages paid domestic servants whose time is partly occupied in caring for these rooms. Membership dues in professional societies are deductible. Physicians and dentists who keep in their waiting rooms current magazines and newspapers for the benefit of their patients may deduct this item as a business expense. The cost of professional journals for the taxpayer's own use is also a deductible item.

The cost of technical books is not a deductible item, being a capital expenditure, but a proportionate amount for each year's depreciation of

the books may be deducted. Depreciation may also be taken on office furniture and equipment. Insurance premiums on office or other professional equipment and liability insurance may be deducted. A premium paid for automobile liability insurance should be apportioned and that part of the premium attributable to business may be deducted as a business expense.

TAXES DEDUCTIBLE FROM INCOME: If you are the owner of real estate, business or residential, you have during the last year doubtless paid the taxes on it. Perhaps you have also paid a tax on personal property, as well as other imposts. In making up your income-tax return for 1939, you are entitled to deduct from gross income these amounts.

Several salient factors, however, are to be remembered by the taxpayer in claiming a deduction for taxes. In general, taxes are deductible only by the person upon whom they are imposed.

The Federal Income Tax paid during the year may not be deducted, but the State Income Tax, which is paid to the State by an individual on his income, may be deducted by him on his Federal Income-tax return.

Automobile license fees are ordinarily deductible as a tax. Custom duties paid by a person on articles for his own use are deductible. Import or tariff duties paid in the operation of a business are deductible as taxes, provided they are not added to or made a part of the expenses of the business, or the cost of the merchandise with respect to which they are paid. Postage is not a tax, but the cost of postage used in a business or profession may be deducted as a business expense.

The tax on the rent of a safe-deposit box, on telephone conversations, radio messages, telegrams, and cables is deductible. The Federal tax on automobiles, gasoline, tobacco, and liquor are imposed on the manufacturer, producer, or importer, and are not deductible by the purchaser or consumer. Whether or not the gasoline tax or the sales tax levied by a State may be deducted by the individual purchaser depends upon the terms of the State law imposing the tax, consequently the right to the deduction, as between purchaser and seller, varies in the different States.

Under the Revenue Act of 1936, Federal estate and gift taxes and State inheritance, estate, legacy, or succession taxes are not deductible.

Federal taxes on admissions are deductible, but the taxpayer must show that account has been kept of the amount paid. Guesswork will not be accepted. Under the current Revenue Act the tax applies to admissions in excess of 40 cents. So, if a frequenter of entertainments, a record will prove of value when you file your income-tax return—which is due, remember, on or before March 15, 1940.

DEDUCTIONS FOR CHARITABLE CONTRIBUTIONS: Many persons make during the year charitable contributions and gifts which, within certain limitations provided for by the Revenue Act, are deductible from the taxpayer's gross income in computing net income, upon which the income tax is assessed.

In order to be allowed, such contributions or gifts must meet several tests. They must be made to a corporation, trust, community chest, fund or foundation operated exclusively for religious, charitable, scientific, literary, or educational purposes, or for the prevention of cruelty to children or animals. No part of the income of any such organization may inure to the benefit of private stockholders or individuals. If a substantial part of the activities of the organization is carrying on propaganda or otherwise attempting to influence legislation, it fails to pass the tests.

Every church constitutes a religious corporation for the benefit of this deduction. Contributions made to a missionary fund, church-building fund, and for the benefit of other activities of the church are deductible. Pew rents, assessments, and dues paid to churches, are regarded as contributions and therefore may be deducted.

Gifts to an individual are not deductible, but if made to a charitable organization, as defined by the revenue act, may be deducted, even though the organization distributes the funds among individual beneficiaries. Gifts to any corporation organized or devoted to the advancement of learning are deductible.

Contributions or gifts made during the year 1939 to the United States, any State or Territory or political subdivision thereof, such as a city, town, county, or village, or the District of Columbia, for exclusively public purposes, are deductible. A gift of real estate to a city to be maintained perpetually as a public park is deductible.

Claim for deductions for contributions or gifts must be substantiated. Taxpayers are required to state in their returns the name and address of each organization to which the gift was made, and the amount of the gift in each case.

In addition to the other deductions and personal exemption, an earned income credit is provided as a deduction against net income for normal tax purposes but not for surtax. This earned income credit allowed is 10% of the actual earned income, but cannot exceed 10% of the *net* income. The maximum credit allowable is $1,400, or 10% of a net earned income of $14,000. All income, regardless of source, up to $3,000 is considered as earned. If income is derived from a business in which both personal services and invested capital are income-producing factors, only 20% of the net income from such a business may be considered as earned. Therefore, the earned income credit allowable on income from a business would be 10% of 20% of the net.

DEDUCTION FOR INTEREST: Amounts paid or accrued within the taxable year 1939 as interest on indebtedness are deductible, with certain excep-

tions, from gross income in determining net income. Such items include interest on borrowed money to defray personal expenses, and on money borrowed for the purchase of real or personal property. If a person owes money on a lien or mortgage note on his home, the amount of the interest may be deducted. Indebtedness, however, need not be evidenced by lien, judgment, or mortgage to make the interest on it deductible. Frequently indebtedness is evidenced only by a note.

Interest paid on indebtedness incurred in the purchase of obligations (other than obligations of the United States issued after September 24, 1917, and originally subscribed for by the taxpayer), the interest upon which is wholly exempt from Federal income tax, is not deductible. Interest paid on loans on life insurance policies is deductible provided the amount of the loan is not used for the purposes previously referred to in this paragraph.

Interest paid on behalf of a friend or relative where there is no legal obligation on the part of the payor is not deductible. In such cases the amount is the same as a gift.

As interest paid is deductible, so interest received is taxable. All such amounts, including interest received on bank and savings deposits, must be included in the taxpayer's return of gross income.

POSTGRADUATE COURSES IN OBSTETRICS CONTINUE AT INDIANA UNIVERSITY MEDICAL CENTER

SCHEDULE FOR POSTGRADUATE COURSE IN OBSTETRICS

SPONSORED BY THE COMMITTEE ON POSTGRADUATE EDUCATION OF
INDIANA STATE MEDICAL ASSOCIATION
IN COOPERATION WITH
INDIANA UNIVERSITY SCHOOL OF MEDICINE
AND
BUREAU OF MATERNAL AND CHILD-HEALTH OF INDIANA STATE BOARD OF HEALTH

	Monday	*Tuesday*	*Wednesday*	*Thursday*	*Friday*	*Saturday*	*Sunday*
Continuous	HOSPITAL OBSERVATION SERVICE Coleman and City Hospitals						HOSPITAL OBSERVATION SERVICE
8-9:45 AM	Prenatal Coleman	Prenatal Coleman	Prenatal Lues	Prenatal Coleman	Prenatal Coleman	Clinic Pediatrics City Hosp.	
10-10:50 AM	Bedside Coleman	Bedside City Hosp.	Bedside Coleman	Bedside City Hosp.	Bedside Coleman	Bedside City Hosp.	
11-12 M	Lecture Pediatrics	Lecture	Lecture	Lecture	Lecture Pediatrics	Lecture	
1-2 PM	Lecture	Endocrine Clinic Clinical Bldg.	Postnatal Clinic Coleman Hosp.	Postnatal Clinic Coleman Hosp.	Lecture	Physiology and Anatomy	
2-3 PM	Clinic Pediatrics Coleman				Clinic Pediatrics Riley Hosp.		
3-4 PM	CLINICO-PATHOLOGICAL COURSE						
4-6 PM	DEMONSTRATIONS AND MANIKIN PRACTICE						
8-10 PM		Marion Co. Medical Society			Medical School Seminar		

It is well recognized that some sort of postgraduate education is an obligation of organized medicine and of state institutions for medical education. Attempts to provide such continuing education have resulted in the development of several plans of instruction. These are of two types. In one form they consist of extramural courses, given at selected areas throughout the state, either by the establishment of postgraduate training centers, or by bringing to localized areas the facilities for graduate education. The other type of postgraduate training is the use of already established institutions, such as the state medical school. These two plans have met with varying success, dependent in part upon the locality in which they were offered and in part upon the needs of different communities.

During the past year in Indiana, under the auspices of the Indiana State Medical Association,

the Indiana University School of Medicine, and the Indiana State Board of Health, there has been offered a series of two-weeks postgraduate courses in obstetrics at the Indiana Medical Center. These courses are designed to meet the expressed need of the general practitioner, particularly from the rural areas, for a review of the problems of obstetrics, and for the demonstration of those advances which have taken place in obstetrics during the past years. These courses have met with an enthusiastic response from those physicians who have enrolled, and with almost unanimous favorable comment. Arrangements were made to handle an increased number of men during the school year 1939-1940. There are vacancies in several of the scheduled two-weeks courses, so that there is still an opportunity for enrollment. Unless the response continues to be satisfactory to this type of postgraduate work, it may be necessary to curtail the program after June, 1940.

The instruction is a cooperative effort of the staff members of the Departments of Obstetrics, Pediatrics, and Pathology of Indiana University School of Medicine, and is under the immediate direction of Dr. Carl P. Huber, formerly of the Chicago Lying-In Hospital and Dispensary of the University of Chicago.

An outline of the general program is included with this announcement, and indicates the complete review of the field of obstetrics which is being attempted. Unfortunately, it is not possible, with the present facilities, to offer actual personal experience in the various procedures for delivery, but insofar as possible, they are demonstrated individually, and a constant attempt is made to illustrate the various maneuvers on the patient, by moving pictures, and by manikin demonstration. The courses are open to all physicians of the State of Indiana, and it is hoped by the committee in charge that any physicians who are interested, and who have not yet done so, will make immediate application to the Committee on Medical Education and Hospitals of the Indiana State Medical Association at their headquarters, 1021 Hume-Mansur Building, Indianapolis, Indiana.

These courses are given without cost to Indiana physicians. Studies of similar courses being conducted at other schools of postgraduate education reveal the usual tuition for the courses to be from $50 to $200.

At the satisfactory completion of these courses, physicians are awarded certificates signed by the dean of the Indiana University School of Medicine, the president of the Indiana State Medical Association, and the director of the Indiana State Board of Health.

REMEMBER THAT INDIANA'S PRENATAL LAW GOES INTO EFFECT JANUARY 1, 1940. SEE PAGE 37.

VOICE OF MEDICINE

ADDITIONAL OBSERVATIONS CONCERNING HOUSE BILL 74

When notification of the introduction of this bill was made to the various county societies, the Lawrence County Medical Society obtained a copy of the bill. This copy furnished the basis for our objections to the passage of the bill. We are enumerating below the reasons for our wishing the bill not to pass; but since it has passed, these are our objections to the bill as it now stands.

1. Examination by a physician is not necessary for admission to the state hospital. At the option of the judge, anybody can be committed to these hospitals. If "Bill Jones," who controls some votes in the twelfth precinct does not feel well and thinks he needs a check-up examination, appeals to the judge during election year for admission to the Long Hospital, we are wondering if any judge who needs these votes would turn him down? This makes possible a political admission rather than a medical admission.

2. The bill does not establish penalties for misrepresentation of assets. We can think of no worse set-up than where wealthy people or people of better than average means, having read the law, or having a doctor who is lazy suggest to them that they go to the State Hospital for operations that could as easily be done at the local hospital. This becomes more pernicious because the Bill turns over to a judge who has no contact with the poor of his community (other than as violators of the law) authority to admit these indigent patients and expects him to pass upon the indigency of the applicant.

3. Hiding of costs to local tax paying units is pernicious. The method of collecting monies by this bill is that the state auditor pays all hospital bills and then deducts the money from what is owed to the county. This prevents the local tax-paying unit, i. e., the county, from setting up a sum in its budget for the costs of the state hospital. Unless a man is an auditor, he will have a difficult time in ever finding the amount that we have paid to the state for such care. The local organization never knows or feels the loss of these funds. Obviously, we have one of the worse forms of taxation.

4. The cost of admission, transportation, and incidentals outside of costs of hospital care is often greater than the local costs for medical treatment. We cite the Michigan Filter Plan. Although our state is not divided into two parts, we do have transportation costs and in Michigan tonsillectomies have cost the state more than $300 per case. In our county the average cost of empyema that was cared for at the Riley hospital during the period of 1928 to 1930 was $450 per case. In our own hospitals during this time the *hospital costs plus*

the medical care on indigent cases of empyema averaged $110 per case. The death rate in both hospitals was less than 1%. We believe that this great difference is economically worth investigating.

5. Patients are essential for medical study and training of our doctors by our state. Under this bill the county is made to pay the bill for such material. We believe that this is an entirely wrong precept. Our precept is that our state medical school should stand on its own feet and pay its own bills. We believe that instead of the Coleman and Long Hospitals being built for the care and convenience of the patients, they should be used for the training of medical students and that it is not necessary to have ever expanding facilities for its patients in order to fill this student need. In this connection we suggest, if it is necessary to have more material, that better use be made of its monies by cooperation with the City Hospital. We realize that it will be necessary for the administrators at the medical school occasionally to swallow a little of pride and accept some of the indignities of being subordinate to the city administrators. We who are in smaller cities accept these indignities each day as they are heaped upon our heads by the administrators of the state hospitals.

It is our hope that with the above expression of our stand on this controversial question the doctors of the state will not criticise us too freely and maybe a few will understand that while we disagree with those favoring the Bill, we believe that our stand is honest and right and that our thought on this subject has reason for expression.

CHARLES B. EMERY, M.D., Secretary,
Lawrence County Medical Society

UNDER THE CAPITOL DOME

BOARD MEETING

The annual re-organization meeting of the State Board of Medical Examination and Registration will be held in the board offices in the Statehouse on January 9. Officers for the coming year are selected at the annual meeting. Dr. J. T. Oliphant of Farmersburg was the 1939 president of the board.

DROP IN TRAFFIC FATALITIES

Traffic fatalities in Indiana dropped seven per cent during the first ten months of 1939 as compared with the corresponding period of the preceding year, according to Don F. Stiver, state director of public safety. During the ten-month period a total of 819 lives were lost on Hoosier highways and streets. The toll for the same period in 1938 was 879 lives. Indiana's drop of seven per cent was greater than the national average for the period, the national record being a two per cent drop. Surrounding states all had increases in fatalities.

STATE BOARD OF HEALTH IN NEW BUILDING

The Indiana State Board of Health is now quartered in its new building at the Indiana University Medical Center. Improved laboratory services are available, and quarters are highly satisfactory. Proximity of the board to the University hospitals will increase efficiency of the board and at the same time be beneficial to the hospitals, Dr. Harvey said. Old quarters of the board in the Statehouse Annex have been turned over to other state departments.

NO EPIDEMICS IN 1939

Indiana went through the year 1939 without any serious outbreaks of disease in epidemic form, Dr. Verne K. Harvey, secretary of the Indiana State Board of Health, pointed out as the year closed.

There were a few scattered outbreaks of upper respiratory diseases, notably diphtheria and scarlet fever, but little gastro-intestinal diseases.

The early part of the year, however, witnessed a considerable number of cases of smallpox. The cases were mostly concentrated in the counties in central Indiana.

A tabulation of reported diseases for the entire year has been started but has not yet been completed.

HEALTH AND UNEMPLOYMENT COMPENSATION

Health conditions of employees applying for unemployment compensation are involved in several decisions of the appeal tribunal of the Indiana Unemployment Compensation Division which recently were compiled and issued by the division's review board staff. For the most part these decisions had for their background the professional testimony or letters and statements of physicians, while others were based upon diagnosis or suggestions of physicians to patients who later became applicants for unemployment compensation.

These decisions, while made in individual cases, have a general application and are to serve as guides for future decisions of similar cases; they are interpretations of the various facts as they relate to whether or not an applicant is "able and available for employment." Under the Indiana law an unemployed individual who comes under the unemployment compensation law provisions is entitled to either full or partial compensation allowances provided he is able to work and available for employment. These decisions have laid down rules to determine whether he is "able and available for employment" if certain health conditions exist and whether he is consequently entitled to the compensation.

The effect of a variety of physical handicaps, diseases, and conditions, including rupture, epileptic seizures, colds, pregnancy, and others, upon an employee's eligibility for unemployment compensation is determined in the decisions.

In one of the rulings the requirements of the doctor's certificate for it to be recognized as authentic are set out. This ruling said: "A doctor's certificate stating that an applicant is physically able to work should be a statement in writing on the physician's stationery showing that the physician has actually examined the applicant; the date on which such examination was made and the condition in which the physician found the applicant."

The case in which the requirements were set out involved an applicant who submitted a purported statement from a Chicago physician stating that the applicant was able to work. The statement was on paper taken from a writing tablet and did not indicate that it was stationery of a physician, nor did it state that the physician had examined the applicant. It bore no date.

This same case included a ruling that a person who has suffered a physical injury and has not completely recovered is not physically able to work if his condition is such that it interferes with the performance of his ordinary duties.

Another important decision of the appeal tribunal related to persons infected with syphilis; it held that infected persons are able to work if they are taking regular treatments and their condition is such that it will not infect fellow workers. Weekly certificates from physicians showing both that treatments were administered and that the disease is not in an infectious stage must be shown by these applicants when applying for unemployment compensation, according to the decision.

The decision, made in the case of a group of nine Gary workers infected with syphilis, said that "in view of the seriousness of this disease, and the necessity for constant treatment, the Review Board is of the opinion that while the applicants are now and have been physically able to work, no benefit payments should be made following the date of the hearing by the Review Board unless the applicants submit each week a certificate from their physician or from the clinic showing that they have each reported for their regular treatment during the week and that they continue to be in a non-infectious stage."

In a decision involving ability and availability for employment of persons suffering from rupture, the appeal body ruled that an applicant for unemployment compensation who had voluntarily quit a job involving heavy lifting was entitled to the compensation. The board held, however, that "an applicant who suffers from a rupture so as to be unable to do work involving heavy lifting but is able to do work for which he is reasonably qualified is available for work."

Epileptics were the subject of another decision. The board held that where an epileptic continues to work for an employer in his usual employment it cannot be said he is physically unable to work although it may not be advisable to allow him to work around hazardous machinery.

One decision concerned a woman worker who suffered from colds. Hearings did not disclose that working conditions were particularly injurious to the health of the applicant. She quit on orders from her doctor. Later she presented a doctor's certificate showing that she was physically able to work. The tribunal ruled that during the period after the physician told her to quit work and until his later finding that she was physically able to return to work, she was not entitled to unemployment compensation.

A worker who is physically unable to perform the same type of work he did in his last employment is entitled to establish eligibility for compensation benefits if he can perform full-time services in other lines of work, according to another decision made by the board and included in the book of decisions.

A pregnant woman, another decision held, "is not physically able to work within the meaning of the Indiana Unemployment Compensation Law" and consequently is not entitled to benefits during her pregnancy.

A husband who voluntarily left his work to help care for his sick wife was held to be ineligible for unemployment benefits on grounds of non-availability for work.

ABSTRACTS

HIGH AND LOW BLOOD PRESSURE

The popular notion that low blood pressure is a disease and moderately high pressure normal and safe is fallacious, according to Samuel C. Robinson, M.D., and Marshall Brucer, Chicago, *The Journal of the American Medical Association* for Dec. 2 points out in a discussion of this question. The two men say that on the contrary, longevity is based on three physiologic levels: Low weight, low pulse rate and low blood pressure. The continuous blood pressure history of 500 apparently well men examined annually for about ten years revealed that those with pressures consistently low rarely showed a steady rise, in contrast to those with consistently high pressures even when only of a slight degree.

CLOTTING FACTOR IN STORED BLOOD DECLINES AFTER NINE DAYS

Bank or stored blood is an adequate source, for only about nine days, of plasma prothrombin, the clotting factor which helps prevent hemorrhages, Jere W. Lord Jr., M.D., and John B. Pastore, M.D., New York, declare in *The Journal of the American Medical Association* for Dec. 16.

Longer intervals of storage cause the plasma prothrombin to decline gradually. By the end of the third week of storage, the amount has dropped to 61 per cent of the normal prothrombin.

Deaths

STEWART SLOCUM, M.D., practicing physician in Fortville for the past thirty-six years, was killed instantly in an automobile accident near Van Nuys, California, December eighteenth. Dr. Slocum was seventy-one years old. He graduated from the Central College of Physicians and Surgeons, Indianapolis, in 1900 and specialized in ophthalmology and otolaryngology. He was a member of the Hancock County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association.

JOHN G. JONES, M.D., aged ninety years, died at his home in Indianapolis, November twenty-third, after a short illness. Dr. Jones graduated from Miami Medical College, Cincinnati, in 1872. He practiced in Versailles and Milan for many years, and retired from active practice twenty-five years ago, since when he had lived in Indianapolis.

News Notes

Dr. A. B. Richter has opened an office at 315 Hume-Mansur Building, Indianapolis, where he will practice internal medicine. Dr. Richter practiced in Flora for several years and recently completed postgraduate work in internal medicine at Harvard.

The annual meeting of the Indiana State Board of Medical Registration and Examination will be held January ninth in Indianapolis.

Miss Jeanne Claire Smith of Indianapolis and Dr. Vance J. Chattin of Washington, Indiana, were married in Indianapolis December sixteenth.

DR. WILLIAM C. DUDDENHAUSEN, for thirty-one years a physician in Evansville, died December seventh at his home in Bay View, Michigan, where he had lived for several years. Dr. Duddenhausen was sixty-one years old.

DR. J. T. BRADLEY, former practicing physician in Union and Wayne counties, died December sixth at his home in Grand Prairie, Texas. He went to Texas for residence in 1929.

Miss Thelma Titus of Stone Lake, Wisconsin, and Dr. Fred Dick of Bluffton were married in Indianapolis December twelfth.

Miss Bernice Howell of Whiteland and Dr. John Henry Machledt, of Whiteland, were married in Greenwood, December ninth.

According to newspaper announcement, Dr. John H. Hewitt has again taken full charge of Mudlavia Springs hotel at Kramer, Indiana. Several months ago, Dr. Hewitt limited his work to that of medical director of the institution.

The University of Minnesota Center of Continuation Study offers a continuation course in otolaryngology, February 19 to 24, 1940. Enrollment is limited to ophthalmologists and otolaryngologists. For detailed information, write to Center for Continuation Study, University of Minnesota, Minneapolis.

Dr. James G. Carr, M.D., of Chicago, was awarded the Mississippi Valley Medical Society's distinguished service award for 1939 at the recent annual meeting of the society held at Burlington, Iowa.

The U. S. Public Health Service has issued a booklet, selling for twenty-five cents, entitled "Communicable Diseases." It is written for the layman and is intended as a source of dependable information for students in high schools and junior colleges and discusses about forty infectious diseases, including chicken pox, common cold, diphtheria, measles, gonorrhea, influenza, pneumonia, etc.

Dr. Max Cutler, director of the Chicago Tumor Institute, and Dr. George M. Smith, research associate in Anatomy at Yale University School of Medicine, have been named members of the National Advisory Cancer Council, replacing Dr. C. C. Little and Dr. Ludvig Hektoen, whose terms have expired.

Dr. Alfred W. Adson, chief neuro-surgeon for the Mayo Clinic, will be the guest speaker for the Indianapolis Medical Society at the Indianapolis Athletic Club, January twenty-third. Dr. Adson's subject will be "Pain and Its Control." The meeting will open at 8:15 p. m. Any members of the Indiana State Medical Association who wish to hear Dr. Adson are invited to attend the meeting and will be welcome.

Gifts of approximately $1,500,000 to Northwestern University and approximately $1,000,000 to the University of Chicago have been announced by the trustees of the estate of Clara A. Abbott who died in 1924 and whose estate is now finally closed. Both gifts will be used for medical and chemical research. Other gifts totaling $750,000 were made to hospitals and colleges. Clara Abbott was the widow of Dr. Wallace C. Abbott, founder of Abbott Laboratories.

The second annual conference of the Midwestern Forum on Allergy will be held at the Palmer House, Chicago, January 13 and 14, 1940. An annual "get-together" will be held Saturday evening with informal discussions and demonstrations, which will include:

1. Kodachrome demonstration of allergic skin lesions.
 Leader: Dr. Sam Levine, Detroit, Michigan.
2. Smut Allergy. (microscope demonstration)
 Leader: Dr. F. W. Wittich, Minneapolis, Minn.
3. Drug Allergy.
 Leader: Dr. Theodore L. Squier, Milwaukee, Wisc.
4. Effects of Allergy on Constitution.
 Leader: Dr. Milton Cohen, Cleveland, Ohio.
5. Nasal secretion of allergic and non-allergic types. (microscope demonstration)
 Leader: Dr. French Hansel, St. Louis, Mo.

On Sunday morning, the chairman for the meeting will be Dr. John Sheldon of Ann Arbor, Michigan. The following program will be presented:

1. Results of Atmospheric Research during 1938-1939.
 O. C. Durham, North Chicago, Ill.
2. Mold Allergy.
 Dr. Theron G. Randolph, Milwaukee, Wisc.
3. Nature of Various Mill Dust Allergens.
 Dr. F. W. Wittich, Minneapolis.
4. Allergic Purpura.
 Drs. J. W. Thomas and J. R. Forsythe, Cleveland.

Dr. Jonathan Forman will be chairman for the Sunday afternoon meeting which will be as follows:

1. Arthus phenomenon in relation to allergy (Lantern demonstration).
 Dr. Paul Cannon, Prof. of Pathology, University of Chicago, Chicago, Illinois.
2. Physiological Studies on Histamine in Relationship to Allergy (colored movie).
 Dr. Richard Young, Northwestern University, Chicago, Illinois.
3. Comparative studies on Histamine and Passive Transfer reactions in Neurological patients.
 Dr. Michael Zeller, University of Illinois, Chicago, Illinois.

The National Conference on Medical Service (formerly the Northwest Regional Conference) will hold its fourteenth annual meeting at the Palmer House, Chicago, February 11, 1940. All state medical societies have been invited to send representatives to the conference, which is designed to provide a medium for the verbal exchange of information on progressive medical service activities being conducted throughout the United States, and to discuss problems of medical service. The conference is not official nor political, is not connected with any other organization or committee, and its deliberations result in no resolutions or motions. It is informal, has no dues, by-laws, or organizational structure. The 1940 program includes symposia on group medical care and group hospitalization programs, the allocation of federal funds to the states, public relations, medical welfare programs, etc. Seventeen men, representing as many states in the Union, will be on the program. L. Fernald Foster, M.D., Bay City, Michigan, is president of the National Conference; Forrest L. Loveland, M.D., Topeka, Kansas, is secretary.

INDIANA UNIVERSITY NEWS NOTES

Designed to cooperate with child welfare agencies and physicians throughout the state, a child study and guidance clinic will be established early in January at the James Whitcomb Riley Hospital for Children on the Indiana University Medical Center campus under plans announced by Dean W. D. Gatch of the Indiana University school of medicine.

The new clinic, which will have as its objective the correction of personality maladjustments in children, will be supervised by Dr. David A. Boyd, head of the department of mental and nervous diseases of the University school of medicine, and will be a wholly new department of Riley Hospital.

The work in child study and guidance will be the second major addition of services for children within a few weeks on the I.U. Medical Center campus. A child health clinic was established recently for wards of the Marion County Juvenile Court in the Indianapolis Orphans' Home, and the Marion County Welfare Department.

Children from all counties of the state will be eligible for admission to the child study and guidance clinic on the same basis as child patients now are admitted for other treatment at the Riley Hospital. The new work will be financed by annual grants from a research fund contributed by generous-minded individuals and chiefly from the Louis C. Heusmann Foundation, established as a memorial to the Indianapolis business man and philanthropist who was active in the building of the Riley Hospital.

"The old adage, 'an ounce of prevention is worth a pound of cure,' is particularly true in the mental attitudes of growing children," said Dr. Boyd in outlining the work of the new clinic. "Childhood offers the greatest opportunity for the adjustment of personality problems, the promotion of health, wholesome ways of thinking and behaving, as well as for the prevention of social, moral and mental maladjustments."

The clinic's services, Dr. Boyd explained, will be directed to the parents of the child patients as much as to the children themselves. Parents will be instructed in the best methods of controlling

their children and gradually eliminating the causes of emotional disturbances.

Assisting Dr. Boyd will be Exie Welsch, psychiatrist of the Indiana State Board of Health, Dr. Matthew Winters, chairman of the pediatrics committee of the school of medicine, and Dr. L. T. Meiks, chief pediatrician of Riley Hospital.

Interns appointed to serve the Indiana University Medical Center hospitals in 1940-41 will include 22 graduates of the Indiana University school of medicine and six from out-of-state medical schools, it has been announced by Dr. W. D. Gatch, dean of the school. The appointments are effective July 1, 1940.

Out-of-state appointees are O. Will Allison, Danville, Ill., Jefferson Medical College; Maurice A. Canon, Amarillo, Tex., University of Texas; John N. Carnes, Gallipolis, Ohio, Ohio State University; George P. Smith, Denver, Colo., University of Colorado; Dwain N. Walcher, Nokomis, Ill., University of Chicago, and Henry J. Winsauer, Kohler, Wis., University of Wisconsin.

Appointees from the Indiana University school of medicine are: Eugene W. Austin, Anderson; Robert C. Badertscher, Bloomington; Jene R. Bennett, Plymouth; George E. Brown, Greenwood; Wendell E. Covalt, Muncie; Richard E. Dukes, Dugger; James R. Fant, Indianapolis; Warren Fischer, Gary; Meredith B. Flanigan, Milltown; John J. Flick, Indianapolis; Anne Holovachka, Gary; Carroll E. Kern, Lakewood; Francis J. Kubik, Michigan City; Harry N. McClelland, Indianapolis; Virgil C. McMahan, Bedford; Carl D. Martz, Anderson; Roland E. Miller, Plymouth; Charles W. Morris, Rockville; Joseph E. Mullin, Rockfield; John F. Spahr, Jr., Huntington; John D. Stepleton, Vevay; and C. Willard Worth, Indianapolis.

BOOKS

THE VITAMINS—A Symposium arranged under the auspices of the Council on Pharmacy and Chemistry and the Council on Foods of the American Medical Association. Imitation leather. Price, $1.50 postpaid. Pp. 637. Chicago: American Medical Association, 1939.

So much information has become available about the vitamins, that it is difficult even for experts to keep up with the literature. The present volume is a welcome compendium of authoritative information about these accessory food factors. There are discussions of the chemistry, physiology, pathology, pharmacology and therapeutics, methods of assay, food sources and human requirements of each of the important vitamins. The volume is composed of thirty-one chapters written by experts, and is published under the auspices of the Council on Pharmacy and Chemistry and the Council on Foods of the American Medical Association.

This book should prove to be an indispensable volume for the library of every physician.

A TOPOGRAPHIC ATLAS FOR X-RAY THERAPY. By Ira I. Kaplan, B.S., M.D., Director Radiation Therapy Department, Bellevue Hospital, New York City; and Sidney Rubenfeld, B.S., M.D., Associate Visiting Radiation Therapist, Bellevue Hospital, New York City. 110 pages, with 55 illustrative plates. Cloth. The Year Book Publishers, Inc., Chicago, 1939.

"A Topographic Atlas for X-ray Therapy," by Drs. Ira I. Kaplan and Sidney Rubenfeld is a valuable addition to the working library of the radiation therapist. In this brief volume are fifty-five excellent illustrations depicting the topographical relations of most of the deep structures for which radiological treatment may be required, each plate being accompanied by a short tabulated resume of anatomic landmarks. One might wish the authors had emphasized that this publication is intended particularly as an extension of the instruction given the therapy technician by the radiologist in charge, inasmuch as it is the strong conviction of this reviewer that it is unfair to radiology in general and to the technician and the patient in particular that such work be done without the close supervision of a physician trained in radiology.

However, even the doctor will find it helpful in refreshing his memory and in saving his time when the patient is being placed for treatment. The volume had been purchased by this reviewer immediately after its publication, for these reasons, with the feeling that it should fill a very definite need in the training of technical assistants.

ABSTRACTS

RECOGNIZING LATE CONGENITAL SYPHILIS

A method for recognizing certain eye symptoms in late congenital syphilis, important as a means of distinguishing this condition in adults from the early stages of acquired syphilis, is discussed by Joseph V. Klauder, M.D., and Alfred Cowan, M.D., Philadelphia, in *The Journal of the American Medical Association* for Oct. 28.

The method makes use of slit lamp microscopy in detecting interstitial keratitis (inflammation of the cornea with opaque deposits in its depth), a condition which affects between 25 and 50 per cent of persons with congenital syphilis and which occurs before the age of 15. The authors point out that "with the corneal microscope and slit lamp a diagnosis of old interstitial keratitis can invariably be made, regardless of the age of the patient. We believe that the importance of slit lamp examination in clinical syphilology has not been sufficiently emphasized. The changes observed may be the only evidence of congenital syphilis. Their presence in adults and old patients may explain the absence of a history of infection, and they may serve as a means of interpreting positive or weakly positive results of Wassermann or other syphilis tests. In the presence of other signs of syphilis a diagnosis of old interstitial keratitis determines the status of infection—congenital syphilis—and therefore has an important bearing on treatment and the probable end result."

REPORTS SULFAPYRIDINE OF NO VALUE FOR PULMONARY TUBERCULOSIS

Sulfapyridine proved of no value in the treatment of seven patients with active pulmonary tuberculosis, Stanton T. Allison, M.D., and Robert Myers, M.D., New York, report in the Oct. 28 issue of *The Journal of the American Medical Association.*

"The object of our study," the two physicians say, "was to ascertain the immediate effects of the drug on the tuberculosis over a relatively short period of time. No evidence was obtained to indicate that sulfapyridine influenced the course of the tuberculosis in these cases."

THE PLATFORM OF THE AMERICAN MEDICAL ASSOCIATION

Editor's Note: In the December issue of THE JOURNAL the eight points of the "platform" were published, as set out in bold face type below. However, time and space did not permit us to include the explanatory notes following each point and, therefore, the eight points are republished and the notes are added so that every Indiana physician may know exactly what is proposed.

1. The establishment of an agency of federal government under which shall be coordinated and administered all medical and health functions of the federal government exclusive of those of the Army and Navy.

Today the medical and health functions of the United States are divided among a multiplicity of departments, bureaus, and federal agencies. Thus, the United States Public Health Service is in the Federal Security department; the Maternal and Child Welfare Bureaus in the Department of Labor; the Food and Drugs administration in the Department of Agriculture; the Veterans' Administration and many other medical functions are separate bureaus of the government. The WPA, CCC, and PWA are concerned with a similarity of efforts in the field of preventive medicine. The Federal Works Administration and the Federal Housing Administration also have some medical functions.

Since 1875, the American Medical Association has urged the establishment of a single agency in the federal government under which all such functions could be correlated in the interest of efficiency, the avoidance of duplication, and a saving of vast sums of money. Such a federal health agency, with a secretary in the cabinet, or a commission of five or seven members, including competent physicians would be able to administer the medical and health affairs of the government with far more efficiency than is now done.

2. The allotment of such funds as the Congress may make available to any state in actual need for the prevention of disease, the promotion of health and the care of the sick on proof of such need.

The physicians of the United States have given freely of their time and of their funds for the care of the sick. Their contributions to free medical service amount to at least $1,000,000 a day. The physicians of this country have urged that every person needing medical care be provided with such care. They have urged also the allotment of funds for campaigns against maternal mortality, against venereal disease, and for the investigation and control of cancer. The medical profession does not oppose appropriations by Congress of funds for medical purposes. It feels, however, that in many instances states have sought aid and appropriations for such functions, without any actual need on the part of the state, in order to secure such federal funds as might be available. It has also been impossible, under present technics, to meet actual needs which might exist in certain states with low per capita incomes, with needs far beyond those of wealthier states, in which vast sums are spent.

It is proposed here simply that Congress make available such funds as can be made available for health purposes; that these funds be administered by the federal health agency, mentioned in the first plank of this platform, and that the funds be allotted on proof of actual need to the federal health agency, when that need be for the prevention of disease, for the promotion of health, or for the care of the sick.

3. The principle that the care of the public health and the provision of medical service to the sick is primarily a local responsibility.

Obviously if federal funds are made available to the individual states for the purposes mentioned in the second plank of this platform, there might well be a lessened tendency in many communities to devote the community's funds for the purpose, and, in effect, to demand that the federal government take over the problem of the care of the sick. Hence, it is suggested that communities do their utmost to meet such needs with funds locally available before bringing their need to the federal health agency, and that the federal health agency determine whether or not the community has done its utmost to meet such need before allotting federal funds for the purpose.

4. The development of a mechanism for meeting the needs of expansion of preventive medical services with local determination of needs and local control of administration.

The medical profession is not static. It wishes to extend preventive medical service to all of the people within the funds available for such a purpose. Obviously, this will require not only a federal health agency which may make suggestions and initiate plans, but also a mechanism in each community for the actual expansion of preventive medical service and for the proper expenditure of funds developed both locally and federally. In the development of new legislation such mechanism may be suitably outlined.

5. The extension of medical care for the indigent and the medically indigent with local determination of needs and local control of administration.

The medical profession does not yield to any other group in this country in its desire to extend medical care to all of those unable to provide themselves with medical service. The American Medical Association through its House of Delegates has already recognized the possible existence of a small group of persons able to provide themselves

with the necessities of life commonly recognized as standard in their own communities, but not capable of meeting a medical emergency. It is recognized, however, that only persons of the same community fully familiar with the circumstances can determine the number of people who come properly under such classification and that only persons in actual contact with such instances are capable of administering suitably and efficiently the medical care that may be required. Hence it is the platform of the American Medical Association that medical care be provided for the indigent and the medically indigent in every community but that local funds to be first utilized and that local agencies determine the nature of the need and control the expenditure of such funds as may be developed either in the community or by the federal government.

6. In the extension of medical services to all the people, the utmost utilization of qualified medical and hospital facilities already established.

In the so-called National Health Program it is asserted that one-half the counties of the United States are without suitable hospitals, and vast sums are requested for the building of new hospitals. In contrast, reputable agencies within the medical profession assert that there are only 13 counties more than 30 miles removed from a suitable hospital and that in 8 of those 13 counties there are five people per square mile. In the United States today the percentage of hospital beds per 1,000 of population is higher than that of any other country in the world. This fact is completely ignored by those who would indulge in a program for the building of great numbers of new hospitals.

Moreover, it seems to be taken for granted that hospital building has languished in recent years, whereas considerable numbers of hospitals have been built with federal funds by various state agencies and also by the PWA, the WPA and by the Federal Works Administration.

Analyses may indicate that in many instances such hospitals were built without adequate study as to the need which existed or as to the possible efficient functioning once it was erected. Moreover, there is evidence that in recent years many of the hospitals of the United States, known as non-profit voluntary hospitals have had a considerable lack of occupancy due no doubt to the financial situation in considerable part. It seems logical to suggest then that such federal funds as may be available be utilized in providing the needy sick with hospitalization in these well established existing institutions before any attempt is made to indulge in a vast building program with new hospitals. In this point of view the American College of Surgeons, the American Hospital Association, the Catholic Hospital Association, the Protestant Hospital Association and practically every other interested voluntary body agree.

Again it has been argued that the demands for medical care in some sections of the country might require the importation of considerable numbers of physicians or the transportation of numbers of physicians in the areas in which they now are to other areas. In this connection it would seem to be obvious that a change in the economic status of the communities concerned would result promptly in the presence of physicians who might be seeking locations. The utilization of existing qualified facilities would be far more economical than any attempt to develop new facilities.

7. The continued development of the private practice of medicine, subject to such changes as may be necessary to maintain the quality of medical services and to increase their availability.

In the United States today our sickness and death rates are lower than those of any great country in the world. This fact was recognized by the President of the United States when he sent the National Health Program to the Congress for careful study. The President emphasized that a low death rate may not mean much to a man who happens to be dying at the time of tuberculosis. The medical profession recognizes the importance of doing everything possible to prevent every unnecessary death. At the same time it has not been established by any available evidence that a change in the system of medical practice which would substitute salaried government doctors for the private practitioner or which would make the private practitioner subject to the control of public officials would in any way lower sickness and death rates.

There exists, of course, the fact that some persons are unable to obtain medical service in the circumstances in which they live and that others, surrounded by good facilities, do not have the funds available to secure such services. Obviously here again, there is the question of economics as the basis of the difficulty and perhaps lack of organization in distribution of medical service and a failure to utilize new methods for the distribution of costs which might improve the situation.

The medical profession has approved prepayment plans to cover the costs of hospitalization and also prepayment plans on a cash-indemnity basis for meeting the costs of medical care. It continues, however, to feel that the development of the private practice of medicine which has taken place in this country has led to higher standards of medical practice and of medical service than are elsewhere available and that the maintenance of the quality of service is fundamental in any health program.

8. Expansion of public health and medical services consistent with the American system of democracy.

Careful study of the history of the development of medical care in various nations of the world

leads to the inevitable conclusion that the introduction of methods such as compulsory sickness insurance, state medicine and similar technics results in a trend toward communism or totalitarianism and away from democracy as the established form of government. The intensification of dependence of the individual on the state for the provision of the necessities of life tends to make the individual more and more the creature of the state rather than to make the state the servant of the citizen. Great leaders of American thought have repeatedly emphasized the fact that liberty is too great a price to pay for security. George Washington said, "He who seeks security through surrender of liberty loses both." Benjamin Franklin said, "They that can give up essential liberty to obtain a little temporary safety deserve neither liberty nor safety."

In these times when the maintenance of the American democracy seems to be the most important objective for all the people of this country, the people may well consider whether some of the plans and programs that have been offered for changing the nature of medical service are not in effect the first step toward an abandonment of the self-reliance, free will and personal responsibility that must be the basis of a democratic system of government.

SOCIETIES AND INSTITUTIONS

INDIANA STATE MEDICAL ASSOCIATION
EXECUTIVE COMMITTEE

November 12, 1939.

Roll call showed the following present: C. A. Nafe, M.D., chairman; C. H. McCaskey, M.D.; E. M. VanBuskirk, M.D.; Karl R. Ruddell, M.D.; M. A. Austin, M.D.; A. M. Mitchell, M.D.; Albert Stump, attorney, and T. A. Hendricks, executive secretary.

Guests: Members of the Medical Relief Committee of the Indiana State Medical Association: John S. Leffel, M.D., chairman; A. E. Stinson, M.D.; S. P. Hoffmann, M.D.; J. T. Oliphant, M.D., and R. B. Smallwood, M.D.

Samuel Cleland, attorney for taxpayers' association at Fort Wayne; Charles Dawson, secretary, Township Trustees Association; Leo X. Smith, attorney for Township Trustees Association.

Treasurer's Office

Report of treasurer deferred until the next meeting.

The statements of receipts and expenditures for October for the Association committees and THE JOURNAL were approved.

Membership Report

Number of members Nov. 11, 1939....3120 (96 hon. mems.)
Number of members Nov. 11, 1938....3072
Gain over last year..... 48
Number of members Dec. 31, 1938....3087

Suggestion made that THE JOURNAL carry an editorial in order to clear up the misunderstanding which often exists when a man is given the retired or honorary membership status in a local society and thinks that this automatically gives him an honorary membership in the state association. Honorary membership in the state association can be obtained only when a physician has been a member of his county and state societies for twenty years and has reached the age of seventy-five years.

Matters referred to Executive Committee by House of Delegates and Council

1. M-day resolution communications sent to the surgeon-general, the American Medical Association, service organizations, and state society secretaries.

2. Committee's attention called to the fact that the resolution "that the provision in the Constitution and By-Laws of the Indiana State Medical Association requiring that members of component county societies be legally licensed to practice medicine, be, and hereby is, construed and interpreted to mean legally licensed to practice medicine in the State of Indiana" was approved by the House of Delegates.

Letter received from Dr. Olin West, secretary of the American Medical Association, commending the action of the House of Delegates in this regard and stating that he hopes such action will be taken in each state.

3. Discussion of the payment of medical fees for the care of those who receive old age pensions by Dr. W. A. Thompson and Dr. R. A. Hedgcock referred to the new Medical Relief Committee.

Copy of the Wisconsin survey entitled "Medical Care for Recipients of Social Security" referred to the Medical Relief Committee.

4. Dr. Norton's suggestion in regard to the 1938 cult survey referred by the committee to the present Committee to Study Cultists and Irregular Practitioners.

5. The committee approved sending a copy of the debate upon registration fee to each delegate and county society secretary.

6. The House of Delegates accepted the report of the Executive Committee upholding the committee in its suggestion concerning hospital insurance and the endorsement of non-profit hospital plans. As a matter of fact the House of Delegates went further and endorsed non-profit medical care plans as well.

7. The House deferred action on the "delegates" resolution for further study.

8. *Raise in Dues.* The Executive Committee approved the memorandum to be sent to secretaries concerning the raise in dues and Dr. Ruddell in his first president's page in January is to dis-

cuss this subject, comparing the Indiana dues with other state association dues and commenting upon the benefits received from membership in the Indiana State Medical Association.

9. Action of the House of Delegates concerning the University hospital bill brought to the attention of the committee, and the entire matter was referred to the Medical Relief Committee.

10. Suggestion of Dr. Vore of Plymouth in regard to the state association organizing a health and accident insurance company for its members referred to the Permanent Study Committee on Health Insurance and National Medical Situation. Report to be made at the midwinter meeting of the Council.

11. Vouchers prepared for payment of traveling expenses of committeemen. Suggestion made by the committee that hereafter vouchers be sent with notices to attend meetings.

1940 Annual Session at French Lick

The Executive Committee tentatively set October 14, 15 and 16, 1940, as the meeting dates. (Day following meeting word received at headquarters office that the Inter-State Postgraduate Assembly would be held the week of October 14, 1940, at Cleveland and so an attempt has been made to make arrangements with the French Lick Hotel for the dates of Monday, Tuesday and Wednesday, September 30, October 1 and October 2.)

Suggestion made that reference committee rooms be arranged on the mezzanine floor of the French Lick Hotel.

Report made by Dr. Ruddell and Dr. McCaskey on preliminary arrangements at French Lick concerning the change in location of commercial exhibits so that they will be in the lobby, and also on the arrangements for the annual smoker.

Legislative, Legal and Social Security Matters

National

Reported action among women's clubs to support the Wagner bill brought to the attention of the committee. This matter was referred to the attention of the local woman's auxiliary.

Notice in regard to conference on child welfare to be held in Washington January 18 to 20, 1940, as a follow-up of the White House conference on child welfare held some months ago brought to the attention of the committee.

Newspaper release from the Federal Social Security Agency concerning medical service by the Federal Government referred to Dr. Austin.

Letter received from Louis Ludlow, congressman from Indiana, in answer to communication concerning the Army Medical Library and Museum building in Washington forwarded to William C. Woodward, M.D., Bureau of Legal Medicine and Legislation of the American Medical Association.

Announcement of the formation of the National Physicians' Committee with headquarters in Chicago brought to the attention of the committee. This organization, according to its letterhead, is a "non-political, non-profit organization for maintaining ethical and scientific standards and extending medical service to all the people."

Clippings from the Indianapolis *Star* and the New York *Times* in regard to the Supreme Court refusing to review the anti-trust law case against the A.M.A. brought to the attention of the committee.

Organization Matters

State Committee on Physical Therapy proposed.

Group Hospitalization and Medical Service Plans

Copies of the New Jersey Medical Service plan distributed to members of the committee.

Dr. Forster desires opinion of the committee in regard to a plan that may be worked out at Gary between the medical society and the CIO. He wants information as to whether or not this would conflict with the ruling of the Insurance Department concerning non-profit organizations. This matter was referred to Albert Stump who was to write to Dr. Forster concerning this question.

A folder on the California Physicians' Service Plan was brought to the attention of the committee by Dr. Frank Gastineau and Dr. Norman Beatty. Several members of the committee are to be in California in January and they will make an investigation into this plan. Dr. Gastineau and Dr. Beatty are to be asked to attend a future meeting of the committee to discuss this plan.

Postgraduate

Report made of the recent meeting of the postgraduate committee of the state association and plans are to be made to establish additional courses at Richmond, Terre Haute, Washington, Marion and New Albany.

The postgraduate committee is planning on having a postgraduate page in THE JOURNAL each month if additional centers for postgraduate work can be established.

Medical Economics

Albert Stump reported to the committee that in his opinion gross income tax collectors have a right under the law to see the cards on individual patients if these inspectors demand that of doctors. The executive secretary was instructed to discuss this matter with Fred C. McClurg, chief counsel for the Gross Income Tax and Store License Division.

Letters in regard to the proposed establishment of a convalescent home in Evansville from Dr. C. S. Laubscher brought to the attention of the committee. The committee felt that such a proposal was purely local but it would be well for Dr. Laubscher to consult the insurance department as to whether or not his proposed method of paying for these services conflicted with the insurance laws of the state.

Complaint from the Dearborn-Ohio County Medical Society against a company in that locality practicing medicine without a license brought to the attention of the committee. Copies of the letter were sent to the State Board of Medical Registration and Examination and the attorney

of the state association. The attorney suggested that rather than bringing any suit against the company it would be better for the officers of the local society to take the question up directly with the company.

Letter in regard to industrial health and industrial relations brought to the attention of the Executive Committee. It was the consensus of opinion of the committee that this is one of the difficult problems facing the profession at the present time.

Indigent Sick

The Executive Committee held a session with the representatives of the taxpayers' group and the Township Trustees Association.

A report on the medical relief situation, published by the Ohio State Medical Association, and an article in the Township Trustee *Journal* on township medical costs, and a copy of instructions to referral physicians of Lake County referred to the new Medical Relief Committee for its study and consideration.

U. S. Pharmacopoeial Convention in Washington, D. C., May 14, 1940

Letter received from Dean C. B. Jordan brought to the attention of the committee. The committee suggested that the following three men might be considered as possible representatives from the Indiana State Medical Association: Dr. Samuel Kennedy, Shelbyville; Dr. C. Richard Schaefer, Indianapolis, and Dr. R. A. Solomon, Indianapolis. Information was to be obtained as to whether or not Dr. Solomon would attend the meeting as a representative of the Indiana University School of Medicine.

State Conference on Social Service Work

The general opinion was that the part of the program supplied by the Indiana State Medical Association was satisfactory.

Letter received from Miss Eva F. MacDougall stating that the executive secretary of the state medical association had been named vice-chairman of the health section of the conference and Dr. H. J. Norton of Columbus was appointed a member of the conference executive committee for 1940. These appointments were approved by the Executive Committee.

Future Medical Meetings

Nov. 17-18, 1939—Conference of state society secretaries, Chicago.

January 7, 1940—Midwinter Council meeting; Budget Committee meeting.

January 21, 1940—Secretaries' Conference.

February 11, 1940—Northwest Regional Conference, Chicago.

Letter received from Marian McFadden, daughter of Dr. McFadden, thanking the state association for its telegram of condolence at the time of her father's death.

The Journal

Request that complimentary copies of THE JOURNAL be sent regularly to the National Health Library, New York, approved.

WOMAN'S AUXILIARY

President—Mrs. W. E. Tinney, Indianapolis.
President-elect—Mrs. C. R. Bock, Muncie.
Corresponding Secretary—Mrs. Byron Rust, Indianapolis.
Treasurer—Mrs. C. V. Rozelle Anderson.

WOMAN'S AUXILIARY TO THE INDIANA STATE MEDICAL ASSOCIATION

Our state president, Mrs. William E. Tinney, attended the board meeting of the National Auxiliary in Chicago, November seventeenth. Auxiliary presidents from twenty states were present. The work of the Indiana auxiliary compared favorably with that of other states.

With the January issue, we are introducing a series of short articles telling of the work of the various Indiana county auxiliaries. They will be used alphabetically whenever possible, and we are planning to have photographs of auxiliary presidents appear with the articles. Allen County's report follows.

MRS. CLIFFORD C. TAYLOR, *Chairman*,
PRESS AND PUBLICITY COMMITTEE.

ALLEN COUNTY AUXILIARY

WOMAN'S MEDICAL AUXILIARY COLLECT

We ask Thee, Oh God of Heaven and Earth, to keep us, we the helpmates of those whose life work is the ministry of healing.

May we learn to know their sacrifice is not small, but motivates their lives in service to others.

Help us to have an unselfish, understanding heart;

Keep us patient and forbearing and, as it is given us to keep the hearth of our home fires swept clean of pettiness, so give us strength to be kind, and generous in thought at all times.

—MRS. H. A. RAY.



Mrs. H. A. Ray

Officers of the Woman's Auxiliary to the Allen County Medical Society

President	Mrs. Herbert A. Ray
Vice-President	Mrs. Eugene L. Bulson
2nd Vice-President	Mrs. Orval J. Miller
3rd Vice-President	Mrs. Edward H. Schlegel
Treasurer	Mrs. W. B. Rice
Recording Secretary	Mrs. R. W. Terrill
Corresponding Secretary	Mrs. Chas. J. Cooney

April 27, 1939, the auxiliary to the Allen County Medical Society was organized at Fort Wayne,

Indiana. On June fifteenth an organization tea was held at the home of Mrs. Karl Eberly, to which the wives of members of the Allen County Medical Society were invited. Forty became charter members of the auxiliary.

The program for 1939-1940 was planned with the following aims: legislative, philanthropic, educational-public relations, and social.

A news bulletin issued by the program committee, with Mrs. Arnold Duemling as editor, was adopted as a method of telling all the wives of members of the Allen County Medical Society of the activities of the Auxiliary. The first issue was published in September and contained the names of the officers, chairmen of special committees, the program for the year, and notes on the purpose and privilege of membership in the organization.

The Irene Byron Tuberculosis Sanitarium, near Fort Wayne, gave a picnic supper, September twenty-sixth, in compliment to the members of the Auxiliary. The program consisted of a play entitled "Crusade" which was written, directed, and narrated by Mrs. Alan Chambers. "Crusade" is a short dramatic history of some of the highlights of the fight against tuberculosis. A blackout technique was used showing the scientists and physicians. Anthony Leeuwenhoek appeared first, then Robert Koch, Louis Pasteur, Wilhelm Roentgen, John Howard, Dr. Eric Crull and, finally, Irene Byron. After the play was given, Mrs. Chambers presented the manuscript to Dr. Maurice R. Lohman, president of the Tuberculosis Association of Allen County. Sixty members of the auxiliary were present.

In October the Allen County Auxiliary was hostess to the Eleventh State Auxiliary convention.

On November twenty-first, a meeting was held at the Methodist Hospital. Mr. Franklin, superintendent of the hospital, gave a short talk and Mrs. Archie L. Keene reviewed the book—"The Thibaults" by Roger Martin du Gard.

Future meetings are planned for January sixteenth, at St. Joseph Hospital, with the subject "Recent Important Medical Legislation" to be discussed by Dr. Jessie C. Calvin. On April second a dessert bridge will be held at Lutheran Hospital. In May a tea will be held at Fairfield Manor, and a program will be given by Mrs. Werner W. Duemling on the "History of Medicine in Allen County." New officers will be elected at this meeting.

The Allen County Auxiliary now has a membership of ninety and by the end of the year hopes to interest all of the wives of the members of the Allen County Medical Society.

TIME TO PAY YOUR DUES!

LOCAL SOCIETY REPORTS

OFFICERS OF COUNTY SOCIETIES FOR 1940

ADAMS COUNTY:

President, Floyd L. Grandstaff, Decatur
Vice-president, C. P. Hinchman, Geneva
Secretary-treasurer, H. F. Zwick, Decatur

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ALLEN COUNTY (FORT WAYNE) SOCIETY:

President, L. W. Elston, Fort Wayne
Vice-president, E. C. Singer, Fort Wayne
Secretary, R. L. Hane, Fort Wayne
Treasurer, E. L. Cartwright, Fort Wayne

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BOONE COUNTY:

President, Frank Riley, Jamestown
Vice-president, Ralph Harvey, Whitestown
Secretary-treasurer, C. G. Kern, Lebanon

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CARROLL COUNTY:

President, C. E. Carney, Delphi
Vice-president, R. W. Brookie, Flora
Secretary-treasurer, C. L. Wise, Camden

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CLARK COUNTY:

President, N. C. Isler, Jeffersonville
Vice-president, Marshall Varble, Jeffersonville
Secretary-treasurer, R. W. Bruner, Jeffersonville

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DAVIESS-MARTIN COUNTY:

President, A. G. Blazey, Washington
Vice-president, D. H. Swan, Plainville
Secretary-treasurer, C. P. Fox, Washington

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DEARBORN-OHIO COUNTY:

President, F. A. Streck, Lawrenceburg
Vice-president, O. H. Stewart, Aurora
Secretary-treasurer, J. C. Elliott, Guilford

* * *

DELAWARE-BLACKFORD COUNTY:

President, J. H. Clevenger, Muncie
Vice-president, D. A. Covalt, Muncie
Secretary-treasurer, Robert Turner, Muncie

* * *

ELKHART COUNTY:

President, C. L. Amick, Wakarusa
Vice-president, H. K. Lemon, Goshen
Secretary-treasurer, S. T. Miller, Elkhart

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FAYETTE-FRANKLIN COUNTY:

President, A. F. Gregg, Connersville
Vice-president, H. N. Smith, Brookville
Secretary-treasurer, R. H. Elliott, Connersville

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FLOYD COUNTY:

President, Fred Bierley, Elizabeth
Vice-president, A. N. Robertson, New Albany
Secretary-treasurer, P. H. Schoen, New Albany

FOUNTAIN-WARREN COUNTY:

President, J. H. Hewitt, Kramer
Vice-president, W. A. Johnson, Perrysville
Secretary-treasurer, A. L. Spinning, Covington

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FULTON COUNTY:

President, K. K. Kraning, Kewanna
Vice-president, H. W. Markley, Rochester
Secretary-treasurer, A. E. Stinson, Rochester

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GIBSON COUNTY:

President, R. S. McElroy, Princeton
Vice-president, R. W. Wood, Oakland City
Secretary-treasurer, O. M. Graves, Princeton

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GRANT COUNTY:

President, R. F. Braunlin, Marion
Vice-president, Frances J. Price, Marion
Secretary-treasurer, Russell Lavengood, Marion

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HAMILTON COUNTY:

President, C. M. Donahue, Carmel
Vice-president, J. W. Griffith, Sheridan
Secretary-treasurer, H. D. Hill, Noblesville

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HENDRICKS COUNTY:

President, Robert Wiseheart, North Salem
Vice-president, J. S. Smith, Plainfield
Secretary-treasurer, W. T. Lawson, Danville

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HENRY COUNTY:

President, W. C. Heilman, Newcastle
Vice-president, J. S. McElroy, Newcastle
Secretary-treasurer, W. S. Robertson, Spiceland

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HOWARD COUNTY:

President, F. S. Cuthbert, Kokomo
Vice-president, W. J. Marshall, Kokomo
Secretary-treasurer, Robert Kimmick, Kokomo

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HUNTINGTON COUNTY:

President, M. G. Erehart, Huntington
Vice-president, J. B. Eviston, Huntington
Secretary-treasurer, S. M. Casey, Huntington

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INDIANAPOLIS MEDICAL SOCIETY:

President, Ben Moore, Indianapolis
President-elect, J. O. Ritchey, Indianapolis
Vice-president, H. S. Thurston, Indianapolis
Secretary-treasurer, W. M. Dugan, Indianapolis

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JASPER-NEWTON COUNTY:

President, G. D. Larrison, Morocco
Vice-president, E. N. Loy, Rensselaer
Secretary-treasurer, W. C. Mathews, Kentland

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JAY COUNTY:

President, G. V. Cring, Portland
Vice-president, H. J. Hiestand, Pennville
Secretary-treasurer, B. M. Taylor, Portland

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JENNINGS COUNTY:

President, J. H. Green, North Vernon
Vice-president, W. H. Stemm, North Vernon
Secretary-treasurer, D. L. McAuliffe, North Vernon

KOSCIUSKO COUNTY:

President, J. L. Hillery, Silver Lake
Vice-president, E. W. Thomas, Leesburg
Secretary-treasurer, H. F. Steele, Claypool

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LAKE COUNTY:

President, W. H. Howard, Hammond
President-elect, J. S. Niblick, East Chicago
Secretary-treasurer, Harry Brandman, Whiting

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LAWRENCE COUNTY:

President, J. R. Pearson, Bedford
Vice-president, Claud Dollens, Oolitic
Secretary-treasurer, C. B. Emery, Bedford

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MADISON COUNTY:

President, W. M. Miley, Anderson
Vice-president, George Overpeck, Alexandria
Secretary-treasurer, M. A. Austin, Anderson

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MORGAN COUNTY:

President, A. D. Sweet, Martinsville
Vice-president, M. G. Murphy, Morgantown
Secretary-treasurer, P. M. Alexander, Martinsville

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NOBLE COUNTY:

President, F. C. Hardy, Kendallville
Vice-president, J. R. Nash, Albion
Secretary-treasurer, W. F. Carver, Albion

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PERRY COUNTY:

President, E. E. Schriefer, Cannelton
Vice-president, J. E. Taylor, Leopold
Secretary-treasurer, B. V. Lally, Tell City

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PIKE COUNTY:

President, John T. Kime, Petersburg
Vice-president, Ellis L. Pollock, Winslow
Secretary-treasurer, L. M. McNaughton, Petersburg

* * *

POSEY COUNTY:

President, W. B. Challman, Mount Vernon
Vice-president, Paul Boren, Poseyville
Secretary-treasurer, W. E. Jenkinson, Mount Vernon

* * *

PUTNAM COUNTY:

President, Dick J. Steele, Roachdale
Secretary-treasurer, George McCoy, Greencastle

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RANDOLPH COUNTY:

President, Robert Reid, Union City
Vice-president, L. W. Painter, Winchester
Secretary-treasurer, V. K. Stoelting, Winchester

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RIPLEY COUNTY:

President, A. A. Whitlatch, Milan
Vice-president, W. C. McConnell, Sunman
Secretary-treasurer, R. Lee Smith, Osgood

* * *

ST. JOSEPH COUNTY:

President, M. D. Wygant, Mishawaka
Vice-president, Marion Hillman, South Bend
Secretary-treasurer, M. J. Thornton, South Bend
Asst. secretary-treasurer, C. M. Sennett, South Bend

SHELBY COUNTY:

President, W. W. Tindall, Shelbyville
Vice-president, R. M. Nigh, Fairland
Secretary-treasurer, J. A. Davis, Flat Rock

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SULLIVAN COUNTY:

President, I. H. Scott, Sullivan
Vice-president, F. M. Dukes, Dugger
Secretary-treasurer, J. B. Maple, Sullivan

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SWITZERLAND COUNTY:

Secretary-treasurer, R. M. Copeland, Vevay
(This society has no regular meetings)

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TIPPECANOE COUNTY:

President, C. H. Rommel, Lafayette
Vice-president, W. T. Cox, Lafayette
Secretary, J. C. Burkle, Lafayette
Treasurer, Charles Hupe, Lafayette

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VANDERBURGH COUNTY:

President, Minor Miller, Evansville
Vice-president, Charles Willis, Evansville
Secretary-treasurer, L. Paul Hart, Evansville

* * *

WABASH COUNTY:

President, Z. M. Beaman, North Manchester
Vice-president, J. G. Kidd, Roann
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BUREAU OF COMMUNICABLE DISEASES

Monthly Report, October, 1939

Diseases	*Oct., 1939*	*Sept., 1939*	*Aug., 1939*	*Oct., 1938*	*Oct., 1937*
Tuberculosis	92	141	193	167	432
Chickenpox	128	25	11	82	93
Measles	30	19	14	33	55
Scarlet Fever	320	204	91	496	576
Smallpox	24	5	3	29	10
Typhoid Fever	8	54	33	27	16
Whooping Cough	155	260	234	107	107
Diphtheria	89	67	23	165	113
Influenza	10	24	8	62	124
Pneumonia	23	33	25	78	63
Mumps	54	35	24	29	19
Poliomyelitis	19	12	4	6	19
Meningitis	2	0	0	4	3
Encephalitis	1	8	0	1	1
Malaria	27	8	9	23	0
Undulant Fever	8	3	10	3	5
Septic Sore Throat	4	0	0	1	0
Rocky Mountain Spotted Fever	1	3	6	1	0
Trachoma	2	9	6	0	0
Tularemia	6	2	0	0	0
Bacillary Dysentery	0	72	0	0	0
Amebic Dysentery	0	1	0	0	0
Tetanus	0	2	0	0	0

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LOCAL MEETINGS

Adams County Medical Society members met at Decatur, December first. Dr. E. R. Carlo of Fort Wayne spoke on "Heart Disease in Children."

* * *

Bartholomew County Medical Society held a meeting at the county hosital, December sixth. Discussion of the indigent care program of the past year formed the program.

* * *

Carroll County Medical Society members met at Delphi, December twelfth. Dr. Frank Peyton of Lafayette talked on "Maternal Health and Welfare." This was a dinner meeting with election of officers for 1940.

An auxiliary to the Carroll county society was formed with Mrs. C. C. Crampton as president, Mrs. C. L. Wise as vice-president, Mrs. H. Y. Mullin as secretary, and Mrs. E. H. Brubaker as treasurer.

* * *

Daviess-Martin County Medical Society held a business meeting at Washington, December nineteenth. Attendance numbered fifteen. Officers for 1940 were elected.

* * *

Dearborn-Ohio County Medical Society held a meeting at the Dearborn Country Club, November thirtieth. Dr. J. L. Axby, state veterinarian, talked on "Importance of Friendships Formed Before Middle Life." This was an annual banquet with twenty-seven in attendance. Officers for 1940 were elected.

* * *

Delaware-Blackford County Medical Society held a meeting in Muncie, November twenty-first, to hear Dr. L. R. Mason talk on "Drug Addiction." Dr. Elmer Cure discussed the paper. Attendance numbered thirty-six. Officers were elected for 1940.

* * *

Fayette-Franklin County Medical Society held a meeting at the McFarlan Hotel in Connersville, December eleventh. Dr. Lyman T. Meiks of Indianapolis talked on "Treatment of Infectious Diseases of Childhood."

* * *

Floyd County Medical Society held its annual meeting December eighth at New Albany, together with the Ladies' Auxiliary of the society. The president, Dr. William Weaver, presided. Officers for 1940 were elected. Motion pictures were shown.

Fort Wayne Medical Society held a meeting at the Chamber of Commerce Building, Fort Wayne, November twenty-first, with Dr. Tom Outland of Elizabethtown, Pennsylvania, as guest speaker. Dr. Outland talked on "Treatment of Compression Fractures of the Spine" to the fifty-three attendants at the meeting.

At the December fifth meeting, which was a dinner meeting, Dr. Charles E. Galloway of Northwestern University was the guest speaker. His subject was "Management of Toxemia of Pregnancy." There were sixty-six present. The society adopted amendments increasing the society dues to seventeen dollars per year.

* * *

Fort Wayne (Allen County) Medical Society met at the Chamber of Commerce Building in Fort Wayne, November twenty-eighth. Case reports were presented by Drs. T. R. Borders, Wayne R. Glock, S. R. Mercer, and E. L. Cartwright. Attendance numbered forty.

* * *

Fountain-Warren County Medical Society held a meeting in Attica, December seventh. Motion pictures on the medical use of oxygen were shown. Attendance numbered twenty-four.

* * *

Gibson County Medical Society held a meeting at the Methodist Hospital, Princeton, December eleventh. Dr. H. L. Stanton of Evansville talked on "Treatment of the Common Cold, Including Sinus Infections." Attendance numbered eighteen. The dinner was supplied by the hospital superintendent and board.

* * *

Greene County Medical Society met at the Freeman County Hospital in Linton, December fourteenth, with seven in attendance. Because of lack of a quorum, the meeting was not opened.

* * *

Hamilton County Medical Society held its regular meeting November fourteenth at Sheridan. Fourteen members were present.

* * *

Hendricks County Medical Society held a meeting at Danville, November twenty-eighth, at Crawley's Hall. Dr. John Cunningham of Indianapolis talked on "Hyper Thyroid Treatment With X-Ray." Attendance numbered twelve.

* * *

Henry County Medical Society members met at the Davitt Hotel, Lewisville, December thirteenth. Dr. Helen Robinson Michejda told of her recent escape from Poland as a refugee. Attendance numbered fifty. Officers for 1940 were elected.

Jasper-Newton County Medical Society held a meeting at Hoosier Inn, Rensselaer, December seventh. Dr. Harold Shellow of the University of Illinois presented a paper on "Common Skin Infections." Twelve members were present. Officers for the coming year were elected.

* * *

Jay County Medical Society met at the Jay County Hospital, December seventh, with twenty-two physicians present. Officers for 1940 were elected.

* * *

Kosciusko County Medical Society held a meeting in Warsaw, December twelfth, for election of officers. Attendance numbered ten.

* * *

Lake County Medical Society met at Phil Smidt's at Roby, Indiana, December fourteenth, for the annual meeting and election of officers. Attendance numbered 163.

* * *

Miami County Medical Society held a meeting at Dukes Miami County Hospital, November twenty-fourth, with Dr. George Garceau of Indianapolis as guest speaker. Dr. Garceau talked about "Fractures About the Ankle." Attendance numbered twenty.

* * *

Muncie Academy of Medicine met at the Hotel Roberts, December twelfth, to hear Dr. Weston A. Price, D.D.S., of Cleveland, talk on "Light from Primitive Races on the Role of Nutrition in Modern Degeneration, Physical, Mental, and Moral."

* * *

Noble County Medical Society members met at Kendallville, December twelfth. Dr. J. R. Nash of Albion talked on "Our Duties and Methods in Meeting the Requirements of New Laws, Prenatal and Pre-Marital." Attendance numbered twenty-five.

* * *

Northeastern Indiana Academy of Medicine held a meeting at the Kendall Hotel, Kendallville, November thirtieth. Dr. George J. Garceau of Indianapolis talked on "Fractures of the Ankle."

* * *

Owen County Medical Society held a business and social meeting at the home of Dr. R. H. Richards, Patricksburg, November seventeenth.

Perry County Medical Society members held a meeting at Leopold, November twenty-eighth, with eight in attendance.

* * *

Pike County Medical Society members met at the office of Dr. J. T. Kime in Petersburg, December seventh, for election of officers.

* * *

Porter County Medical Society members met at the Hotel Lembke in Valparaiso, November twenty-eighth. Dr. S. L. Governale of Chicago was guest speaker, his subject being "Biliary Tract in General Practice." Attendance numbered sixteen.

* * *

Randolph County Medical Society held a meeting November thirteenth in the Randolph county hospital when Dr. L. G. Montgomery of Muncie was the principal speaker and talked on "Middletown Modernizes Medicine."

* * *

St. Joseph County Medical Society held a meeting at South Bend, December twelfth. This was the annual meeting for election of officers. Attendance numbered seventy.

* * *

St. Joseph County Medical Society members met at the South Bend Medical Laboratory and the LaSalle Hotel, November fifteenth, for an all day meeting. Speakers were Dr. A. C. Ivy of Chicago, Dr. Lewis Rudolph of Chicago, Dr. Edgar F. Kiser of Indianapolis, and Dr. Peter A. Rosi of Chicago. Attendance numbered one hundred seventeen. This was the fifty-fourth annual meeting of the society. The morning session was held at the Laboratory; the afternoon session was held at the LaSalle Hotel.

* * *

Tippecanoe County Medical Society met at Lincoln Lodge, Lafayette, December twelfth for a business and social meeting. The society voted to recommend organization of a Woman's Auxiliary to the county society. Officers for 1940 were elected and a general discussion of business of the society completed the program. Attendance numbered forty.

* * *

Tri-County Medical Society met at Elnora, November twenty-eighth, for a dinner meeting. Twenty-one attended. Dr. Mac Porter of Elnora presented a paper on "Diphtheria."

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IN 1-40

Vanderburgh County Medical Society held a dinner meeting at Evansville, December twelfth. Dr. J. O. Ritchey of Indianapolis talked on "General Management of the Treatment of Pneumonia." There were one hundred in attendance at the meeting. Honoring five men who have practiced or been graduates for fifty years or more, gold medals were presented by Dr. Pierce MacKenzie to Drs. William Laval, G. C. Dunlevy, W. E. McCool, C. E. Laughlin, and I. E. Cottingham. Officers for 1940 were elected.

Wabash County Medical Society held a meeting at Wabash, December sixth, for election of officers. Attendance numbered nineteen. Hosts for the meeting were Drs. J. E. Walker of Lafontaine and J. G. Kidd of Roann.

* * *

Wayne-Union County Medical Society held a meeting at Reid Memorial Hospital, Richmond, December fourteenth. This was a business meeting with election of officers. Attendance numbered thirty-one.

ABSTRACTS

HEPARIN AND SULFAPYRIDINE IN BACTERIAL ENDOCARDITIS

The possibility that heparin (a substance which prevents the blood from coagulating or clotting) together with sulfaypridine, which inhibits the growth of bacteria, may prove of benefit in the treatment of subacute and acute bacterial endocarditis (inflammation of the lining of the heart), a condition almost invariably fatal previously, is indicated in the reports of two groups of medical workers in the Nov. 4 issue of *The Journal of the American Medical Association.*

Endocarditis may occur in childhood but is uncommon until after puberty, when its frequency increases until some time in the early twenties, at which time it gradually decreases, although it may develop at any age. It occurs much more frequently in those who have previously had rheumatic fever. This is particularly true of the less acute forms.

The acute form generally occurs in the course of some severe illness such as pneumonia, childbirth fever, severe gonorrheal infection, influenza, severe tonsillitis or recurrences of rheumatic fever. The germ causing the condition is the same one causing the original infection. Recovery occurs only in rare instances.

The subacute or milder form is much more closely related to rheumatic fever. At least 80 to 90 per cent of such cases follow rheumatic fever and the connection is so close that in many cases there is some doubt as to the separate entity.

The symptoms may be mild at the onset, so much so as to attract little or no attention for some time after the onset of the disease. As in the acute form, the infection is practically confined to the endocardium, especially to the valves, where it results in a productive inflammation, causing vegetation upon the valves, with underlying ulceration of the tissue.

One of the signs of the disease is the occurrence of emboli in various parts of the body. These are small fragments which have become detached from the growths on the valves of the heart, and are carried by the blood stream through the arteries to lodge in some distant part.

Heparin, the substance newly introduced for the treatment of the disease, owes its origin to a Russian, A. Baskoff, who, in 1908 at the Imperial Institute for Experimental Medicine at St. Petersburg, now Leningrad, while analyzing jecorin, a product of horse liver, discovered the substance from which heparin later was isolated.

According to one of the groups of men reporting in *The Journal* this week, Meyer Friedman, M.D., W. W. Hamburger, M.D., and L. N. Katz, M.D., Chicago, heparin, used in cases of endocarditis, keeps the blood more fluid and therefore prevents the laying down of blood platelets and fibrin (blood protein, the primary constituents of a blood clot) on the inflamed areas and permits the white blood cells to come in contact with the diseased areas, sterilizing and repairing them.

The white blood cells are the effective sterilizing and repairing agents and the formation of fibrin and platelets bars their contact with the inflamed areas.

The Chicago physicians state: "We are placing this note on record in order to stimulate further clinical investigation of this method of treating subacute bacterial endocarditis. We are aware that there are theoretical dangers to its use, since in a disease as prone to hemorrhage as subacute bacterial endocarditis is, the use of heparin by interfering with clotting may lead to intractable or even fatal hemorrhage following the rupture of a blood vessel after the formation of a blood clot.

"The sudden liberation of large quantities of bacteria should the vegetation (areas of platelets and fibrin deposits) disintegrate may cause an overwhelming bacteremia (bacteria in the blood stream).

"It has not been shown conclusively that heparin actually prevents the deposition of platelets and fibrin in man, although the evidence is highly suggestive."

In discussing treatment the authors suggest that promptness in starting treatment may be the important and vital factor.

They explain that: "Contraindications to the use of heparin are not sufficient to discourage its use, since the disease is almost inevitably fatal and the possibility exists that some definite good may result. We therefore feel that the further trial of heparin in subacute bacterial endocarditis is warranted."

In the same issue of *The Journal* Saul R. Kelson, M.D., and Paul D. White, M.D., Boston, report on the benefits from using both heparin and sulfapyridine.

They point out that the fact that sulfapyridine acts on the bacteria involved in subacute endocarditis and sterilizes the blood stream for only a comparatively short time led them "to treat the disease not only with sulfapyridine, but also with an anticoagulant, crystalline heparin."

By this method the authors believe that it may be possible to reduce the deposit of blood platelets and fibrin on the inflamed areas of the lining of the heart; prevent blood clots from forming by freeing these deposits as and if they are formed, and by checking the bacterial growth on the inflamed areas permit white blood cells to penetrate these areas. The body's infec-

Continued on page xxiv

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(*Continued from page xxii*)

tion-fighting mechanism is made up of the white blood cells.

Three patients, able to take the heparin for more than a week, Drs. Kelson and White report showed striking improvement and have been free from evidences of the disease for nineteen, eighteen and four weeks respectively after discontinuing treatment.

In contrasting the results in these cases with a control series of 246 patients the authors find that none of the latter remained free from signs and symptoms of the disease for more than five weeks, except one boy, who without specific treatment did so for a full year before he died of rheumatic fever.

"We recognize," the Boston physicians conclude, "the possible danger of excessive bleeding incident to blood clot formation in these cases but believe it fair to accept this risk in the face of the hopeless outcome of the disease. The chances of healing the parts invaded by the bacteria would seem best early in the disease when they are small. In this infection, in which flare-ups with crippling and fatal blood clots strike suddenly, the earliest possible diagnosis and an attempt at early treatment are important."

DEVICE FOR EASILY CHANGING POSITION OF PATIENT IN BED IS DESCRIBED

A device for changing a patient from one bedlike frame to another without lifting him, thus enabling him to spend a part of each day on his abdomen, is described by Homer Stryker, M.D., Ann Arbor, Mich., in *The Journal of the American Medical Association* for Nov. 4.

Many patients with certain types of fractures and with spinal tuberculosis must lie on frames instead of beds. Up to now such a patient has been forced to lie on his back because there was no way of turning him without injuring him.

Dr. Stryker's device, which requires the services of only one attendant and may be used with a minimum of discomfort to the patient, has been found satisfactory in the daily care of from fifteen to twenty hospitalized patients.

"If a patient who requires frame care is allowed to remain a part of the day on his abdomen," Dr. Stryker points out, "he is more comfortable and bedsores, respiratory or kidney complications are less likely to develop."

Explaining the method, the author says: "The patient is placed on his back on a frame. This frame is then suspended about 1 foot from the mattress, each end of which is attached to a turning device which clamps on to the head and foot of the bed. To turn the patient, the anterior (abdominal) frame is placed over him and pressed down firmly, pressing him between the two frames. The anterior frame is then locked in this position. The nurse then releases a spring lock at the end and revolves the two frames, with the patient between them, whereupon the frames automatically lock again, leaving the patient face downward on the anterior frame. Since the patient simply revolves on his long axis without change of the center gravity, little effort is required for the turning. The upper frame (back) is now released and lifted off. While on the anterior frame, the patient's head is supported by an adjustable face piece.

"The patient's eyes are about 15 inches from the mattress, a comfortable distance for reading and writing. The anterior frame is narrowed at the shoulders to allow the arms to be brought down over the sides for comfort.

"In some cases frequent turning may be required, but usually the patient remains on the anterior frame during the day. At night the patient is turned in the same manner to the posterior (back) frame."

NEW DRUG BENEFICIAL IN TREATMENT OF ADDISON'S DISEASE

Thirteen patients with Addison's disease were benefited by treatment with desoxycorticosterone esters (a synthetic glandular-like extract), Joseph W. Ferrebee, M.D., Charles Ragan, M.D., Dana W. Atchley, M.D., and Robert F. Loeb, M.D., New York, report in *The Journal of the American Medical Association* for Nov. 4.

Addison's disease is due to a glandular deficiency affecting the metabolism of salt and water. Its treatment up to the present has been only moderately successful. The ailment is characterized, among other things, by dehydration, brown pigmentation, prostration, anemia and digestive disturbances. Until the isolation of this new drug, patients suffering from Addison's disease received but little benefit from reduced potassium and increased sodium salt content in their diet.

The most striking result from the drug, the New York physicians state, was on metabolism of salt and water, that is, their retention by the patient. "The result of this retention," the authors say, "is an improvement in the patient's condition which is qualitatively identical with that following the administration of salt and water alone, but quantitatively it is far more marked. Clinically there is unequivocal improvement far greater than has resulted from any treatment used heretofore."

Amounts of the drug required vary greatly and extreme caution must be exercised in administering it because excessive doses may lead to heart involvement and other conditions.

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VOLUME 33 FEBRUARY, 1940 NUMBER 2

POSTOPERATIVE PULMONARY COMPLICATIONS AND CO_2 INHALATION THERAPY*

FREDERICK W. CLEMENT, M.D.

TOLEDO, OHIO

Some of the more common postoperative complications following surgical interference are nausea, persistent vomiting, hemorrhage, shock, and pulmonary conditions such as bronchitis, pneumonia and atelectasis.

The pulmonary complications are usually the result of inefficient ventilation, plus infection. Prolonged respiratory depression from any cause results in inefficient lung ventilation and stasis of the pulmonary circulation, both of which are factors favoring infection and subsequent pulmonary pathological changes.

Respiratory depression during surgical operations may be caused by:

(1) Excessive preanesthetic sedation. (Overdosage of morphine or similar drugs is evidenced by shallow, quiet respirations. The use, intravenously, of such drugs as sodium amytal, nembutal, pernoston and pentothal results in a shallow depressed type of breathing.)
(2) Prolonged and especially prolonged deep anesthesia.
(3) Obstruction of the airway from any cause.
(4) Posture. The muscular effort of respiration may be greatly increased by the use of the extreme Trendelenberg position.
(5) High spinal anesthesia, by decreasing the respiratory excursion.
(6) The CO_2 absorption method of anesthesia, removal of the CO_2 results in a quiet shallow type of respiration.
(7) Pulmonary disease—usually chronic in character.
(8) Certain operations, as cholecystectomy, resulting in a reflex "splinting" of the diaphragm.

* Presented before the general meeting of the Indiana State Medical Association at Fort Wayne, October 11, 1939.

Treatment of Respiratory Depression

Role of CO_2

Respiratory depression, both during and after anesthesia and surgery may be effectively treated by the administration of CO_2. Once thought to be an injurious by-product of respiration, we now know that CO_2 plays an essential role in the physiology of respiration, and in general body metabolism. CO_2 controls the depth of breathing, increases the muscular tone, accelerates the blood flow, raises the blood pressure, and facilitates the exchange of gases in the lungs and tissues.

The powerful stimulative effect of CO_2 on the respiration is shown by the fact that "a variation of plus or minus 0.01 per cent in the CO_2 alveolar content will produce a 5 per cent increase or decrease in the pulmonary ventilation"—also "an increase of 0.02 per cent will double or triple the lung ventilation; in contrast, a decrease of 0.02 per cent results in apnoea." (Haldane.)

Because of the beneficial action of CO_2 it may be used to advantage both during and after anesthesia and also for the treatment of such conditions as pneumonitis, persistent hiccoughs, carbon monoxide poisoning, and shock.

Indication for CO_2 Administration

During anesthesia: CO_2 may be added to the anesthetic gases during the induction and early stages of narcosis, to stimulate the depth of breathing. This results in greater absorption of the anesthetic in the lung alveoli, and more rapid attainment of the desired anesthetic level. During the narcosis, CO_2 may be added to stimulate a respiration which may have become depressed from various causes as shock or anesthetic overdose. At the close of operation, increased lung ventilation resulting from CO_2 administration produces a more rapid elimination of the anesthetic. As a rule the CO_2 is administered intermittently, in concentra-

tions of 5 to 10%. It may be delivered from a tank containing 10% CO_2, or the tank may contain a mixture known as carbogen—5 to 10% CO_2 and the balance oxygen. Concentrations of greater than 10% CO_2 are seldom if ever indicated. The continuous administration of even 10% CO_2 may rapidly produce symptoms of overdosage.

The direct administration of CO_2 gas is thus not without danger, because of the possibility of overdosage. It should be remembered that while small amounts of CO_2 act as a respiratory stimulant, large amounts result in marked respiratory depression. Moreover all patients do not react to it in a typical or similar manner. Variation in the response may be due to the depth of anesthesia present, to an obstructed airway, or a reduced vital capacity. During anesthesia, if a patient fails to respond to CO_2 administration with an increased depth of breathing, the tendency is to increase the volume or percentage of the CO_2 being administered in order to produce the desired effect. Not infrequently this may result in the patient's being rapidly overwhelmed with an overdose, even to the point of respiratory arrest. Should this occur, resuscitation with 100% oxygen under pressure is indicated in order to wash out the excess CO_2 and restore the respiratory rhythm.

Rebreathing during anesthesia has for its purpose stimulation of the patient's respiration by his own retained CO_2. While this method is slower than the direct addition of CO_2 from a tank, it is safer in that the danger of rapid overdosage is avoided.

Post Anesthetic Indication

CO_2 inhalation therapy may be used to advantage after every major or prolonged surgical operation. It is especially indicated whenever the respiration has been abnormally depressed during or after the operation, due often to a combination of such factors as overdosage with the premedicative drug or the anesthetic agent, or to the surgical interference.

Its use is also of value following the entry of pus, blood or vomitus into the bronchial tree, after the endoscopic removal of a foreign body from the lungs and for the treatment of surgical shock and pulmonary conditions such as bronchitis, emphysema, broncho-pneumonia and atelectasis.

There are very few contra-indications for the administration of CO_2 postoperatively. Its use is inadvisable in severe cases of shock, acidosis, and certain lung conditions such as lung abscess, acute tuberculosis and hemorrhage of the respiratory tract.

Technique of Administration

Postoperative carbon dioxide administration has for its purpose the vigorous complete expansion of the lung tissue, with acceleration of the circulation and efficient aeration of the blood. Restoration of an active cough reflex will result in expulsion of mucus from the bronchial tubes. The general result is a great decrease in the occurrence of postoperative pulmonary complications. The experiments of Henderson and Haggard show "that the administration of from 6 to 8 per cent carbon dioxide with air or oxygen after prolonged operation, has a powerful restorative effect upon the circulation and particularly upon the venous pressures." The concentration of the carbon dioxide and the frequency of its administration, postoperatively, is determined by the degree of respiratory depression existing during the operation. The desired objective is stimulation of the respiration. The amount required to produce this will vary greatly with different patients.

De-anesthetization by the administration of 5 per cent carbon dioxide and 95 per cent oxygen is desirable after all anesthetic administrations, especially after those with ether or chloroform. It should be continued only to the point of producing a definite hyperpnea and then be gradually decreased so that the respiration is left finally of normal amplitude.

The postoperative inhalation of carbon dioxide and oxygen should be employed as a routine after some thoracic and all abdominal operations, or whenever anxiety is felt for the integrity of the lungs. At least one inhalation of 5 per cent carbon dioxide and 95 per cent oxygen should be given to such patients, lasting for sufficient time to produce the desired degree of hyperpnea. This time is usually from two to three minutes but varies for different individuals. The production of three or four really deep breaths is sufficient. Further administration is unnecessary and may result in fatigue of the patient's respiratory center.

The administration should be by tent, or by any other positive appliance which will ensure the prescribed percentage of carbon dioxide being actually received by the patient. Further inhalations should be administered at intervals of from two to four hours if required, as for example, in cases where it is suspected that vomitus has entered the lungs, or where an effort is being made to avert pneumonia. In such cases, the administration may be continued at two-hour intervals for from twenty-four to forty-eight hours.

The dosage of the carbon dioxide-oxygen mixture cannot, however, be rigidly prescribed. Adjustments must be made in the concentration, duration, and frequency of the administration to suit the individual requirements of the patient. One patient may require stimulation every ten or fifteen minutes during the first hour postoperatively, every twenty minutes during the second hour, and less frequently during the third and subsequent hours. In all cases the objective is the same, namely, the production of hyperpnea which will ensure adequate lung ventilation without depression.

SUMMARY

1. Inhalation of carbon dioxide may be used to increase lung ventilation both during and after anesthesia.

2. Carbon dioxide inhalation therapy is of value after every major operation, regardless of the nature of the anesthetic agent employed.

3. The vigorous respiratory movements resulting from carbon dioxide stimulation reduce the incidence of postoperative pulmonary complications.

4. The desired effect of the carbon dioxide inhalation is a temporary hyperpnea. Excessive stimulation results in depression and should be avoided.

THE CAUSE, PREVENTION AND TREATMENT OF ATELECTASIS*

EVAN G. GALBRAITH, M. D.
TOLEDO, OHIO

In spite of all that has been written on the subject, atelectasis continues to be a common and serious complication following operations. My experience during the past few years indicates that, at least in part, this is due to the fact that many members of the profession have only a hazy idea of what the condition really is or why it develops. They use the term glibly, often using it interchangeably with such words as collapse, massive collapse and even pneumothorax, which are totally different conditions resulting from totally different causes, and yet in their mind's eye they haven't the slightest conception of what an atelectatic lung looks like.

Such being the case, it seems proper at this point to state as clearly as possible the essential pathological changes in such a lung. Grossly it has the appearance of a liver or spleen and sinks when placed in water. The color is due to the excess blood which it contains and it sinks because it no longer contains air. Thus the two essential conditions of an atelectatic lung are: (1) it is airless, and (2) it contains an excessive amount of blood.

The clinical picture is rather characteristic. It most often makes its appearance twenty-four to forty-eight hours after the operation and its onset is usually rather sudden. A patient who has been doing well suddenly becomes sick. He has an elevation of temperature, rapid, labored respiration and is cyanotic. Cough is usually present but at first is not productive.

At this time the x-ray shows increased density of the part affected and a shifting of the mediastinal structures toward the affected side.

Strange as it may seem, the literature on the subject indicates that up to the present time attention has been focused on the first of these changes and the second has been almost entirely ignored. Writers have gone to great length to explain how and why the lung becomes airless but seldom have much to say about the presence of an excessive amount of blood. The theme song of this paper is that this disturbance of circulation, as manifested by the excess blood in the pulmonary vessels and not the absence of air, is the change of clinical importance. After all, it matters little if a lobe of a lung or even an entire lung ceases to function as a respiratory organ, but it matters a great deal if, in the lung so affected, there is a slowing up of the flow of blood through that part. If this impaired circulation lasts long enough, edema results; and edema, here and elsewhere, predisposes to infection. In fact it has been spoken of as the common denominator of all factors that predispose to pulmonary infection.

Uncomplicated atelectasis unless very extensive probably produces no symptoms and for that reason is seldom recognized clinically. It must be remembered that when a diagnosis is made, fever is almost always present and this can only be interpreted as meaning that infection is present and what was once atelectasis has become a pneumonitis. There is good experimental evidence to show that even before the development of atelectasis is complete, infection has started. Nor is the x-ray of much help. It has been shown repeatedly that in the experimental animal the usual x-ray technic for chest work does not reveal extensive atelectasis unless there is a superimposed infection.

The generally accepted cause of atelectasis at the present time is bronchial obstruction. For years there has been plenty of pathological and clinical evidence to show that this explanation is not adequate. It is not an uncommon experience to find extensive atelectasis at the autopsy table where no obstruction in the bronchus can be demonstrated. To explain this by saying that the obstruction had been coughed out prior to death is to assume entirely too much. Furthermore, bronchoscopy has been done on many cases presenting the typical clinical picture of atelectasis, including the x-ray findings, and no obstruction found. It was just this experience that stimulated our interest in this condition some years ago.

Some of the earlier cases of atelectasis were found in patients having a paralysis of the diaphragm following diphtheria and this paralysis was offered as the probable cause of the condition. Later writers, who were inclined toward the bronchial obstruction theory, brushed aside this explanation and, without seeing them, said they were

* Presented before the General Meeting of the Indiana State Medical Association at the Fort Wayne session, October 11, 1939.

due to bronchial obstruction by diphtheritic membrane.

Many other explanations have been offered but when they are all carefully analyzed it will be found that they have one thing in common: failure of the lungs to inflate and deflate.

Recent experimental work shows clearly that the whole question of the cause of atelectasis must be viewed from a much broader standpoint than is held at the present time. Instead of trying to explain it on the basis of one cause it should be thought of as resulting from any cause which interferes with proper inflation and deflation of the lungs.

In the open chest experiment it is possible to observe the changes which take place as atelectasis develops. By clamping a bronchus, being careful not to clamp the blood vessels at the same time, thus preventing the inflation and deflation of that portion of the lungs supplied by that bronchus, the changes can be seen as the atelectasis develops. The first thing to be observed under such conditions is a change in color. The blood vessel soon becomes distended and in a short time that portion of the lungs so affected becomes cyanotic. This change takes place long before there is any change in size. As time goes on this change in color becomes more marked and the lung gradually decreases in size. Both of these processes progress gradually until complete atelectasis results. The changes first appear near the periphery of the lung and are patchy, but later all parts are involved.

If these observations are correct, it becomes apparent at once that the disturbance of circulation precedes the absorption of air.

It has been shown experimentally that when a dog is lying on his side, under deep anesthesia, the lung on the dependent side functions less efficiently than does the other lung. With this information at hand and with the idea that the disturbance of circulation is the important change, a dog was kept under deep anesthesia for twenty-one hours. At autopsy it was found that the dependent lung had undergone extensive change and that some lobes were completely atelectatic. The greatest changes occurred in the lobes nearest the diaphragm. This is presented as experimental evidence that atelectasis can be produced without bronchial obstruction.

From a practical clinical standpoint it should be remembered that this process does not necessarily have to progress to complete atelectasis before it becomes important. There is always infection in the bronchi and if in the presence of this there is a disturbance of pulmonary circulation over a long period of time, infection is likely to occur.

The above conception of the development of atelectasis is based on well known physiological facts. In the first place it must be remembered that the blood pressure in the pulmonary arteries is only one sixth of what it is in the systemic vessels and after it has passed through the capillaries it is found that the pressure in the pulmonary veins is zero. Such being the case, it would seem that the movement which goes with inflation and deflation is essential to a proper emptying of the pulmonary veins into the left auricle. Furthermore, it is a well known fact that there is an enormous amount of blood passing through the lungs at all times. Physiologists say that at the end of inspiration the lungs contain eight percent of all the blood in the body and that at the end of expiration they contain only six percent. This means that two percent of the total blood volume passes through the lungs with each respiratory circuit. Assuming the normal rate of respiration, at sixteen per minute, this means that thirty-two percent of the total volume of blood in the body passes through the lungs each minute. It is only a matter of multiplying this by three to see that practically the entire blood in the body passes through the lungs every three minutes. With this picture in mind it becomes apparent that if, for any reason, the pulmonary circulation is impaired, the blood accumulates in the lungs very rapidly.

It is a well established fact that gases are absorbed from any cavity in the body and that different gases are absorbed at different rates.

With these facts in mind it would seem that the changes that take place in the development of atelectasis are about as follows: First, there is a failure of the lungs to inflate and deflate. This soon results in an accumulation of blood in the affected part. Second, if this condition lasts long enough, and the respiratory effort is so feeble that the part affected is not inflated, the air in that part is sooner or later absorbed and the picture of atelectasis is complete.

The best available statistics on the subject show rather conclusively that under similar conditions the incident of post-operative pulmonary complications is practically the same for all types of anesthesia. Whether it be inhalation anesthesia, local anesthesia or spinal anesthesia seems to make no difference. The length and depth of inhalation anesthesia were found to be the two important factors. In the case of spinal anesthesia it was found that when the anesthesia was low down, the incidence of post-operative complications was about the same as it was in other types. However, when the anesthesia was high and involved the muscles of respiration, the incidence rose very rapidly.

It has also been found that the extent of sedation following the operation was an important factor. Still another factor can be added to this. It has been generally observed that when the operation was in a site that produced soreness so the patient had pain when breathing, pulmonary infection was more likely to occur. This was especially true of operations in the upper part of the abdomen although it has been our observation that it is just as likely to occur in patients who have had an herniotomy even under local anesthesia. This

adds up to what often is spoken of as splinting of a part to prevent pain during respiration.

If these observations are correct, and they appear to be, the prevention of atelectasis following operative procedures depends upon avoiding the things that cause it. This means that depth and length of anesthesia should be reduced to a minimum. Furthermore, before the patient leaves the operating table, the respiration should be stimulated by the administration of CO_2 and oxygen so that the patient takes a few deep breaths, thus overcoming any disturbance in the circulation of the lungs during the anesthesia. This same procedure should be continued after the patient returns to the room until such time as normal respiration is established. Where possible, post-operative sedation should be avoided so that normal respiration will be established with the least possible delay. If the means for carrying out the above described procedure is not available, the least that can be done is to encourage the patient to take deep breathing exercises in an effort to keep the lungs inflating and deflating.

Once the condition is established, the question immediately arises as to how it should be treated. The first and simplest thing to do is to have the patient breathe a mixture of CO_2 and oxygen in an effort to stimulate his breathing. Should this fail to be effective, the face mask is held tightly in place and the lungs inflated under pressure much after the technic used in a patient who is too deep under nitrous oxide anesthesia.

It has frequently been observed that following such a procedure the patient will cough up a large amount of mucopurulent material and improvement follows. One doctor described such improvement as being "immediate and dramatic." Following this, the administration of CO_2 and oxygen should be kept up at frequent intervals until the situation is well under control.

It will be found that if the above technic (both for prevention and treatment) are faithfully carried out, bronchoscopy will seldom be necessary. It goes without saying that if a bronchus is actually plugged and this plug cannot be expelled by coughing, after inflation, bronchoscopy is indicated.

CONCLUSIONS

1. Clinical, pathological and experimental evidence is presented to show that atelectasis can and does develop without bronchial obstruction.

2. It is pointed out that the disturbance of circulation and not the absorption of air is the important pathological change in an atelectatic lung.

3. The probable steps in the development of atelectasis are given.

4. Physiological facts which seem to support the above conception of atelectasis are mentioned.

5. The principle involved in prevention and treatment is maintaining or re-establishing normal respiration.

TOLEDO CLINIC.

ABSTRACTS

INFLAMMATORY DISEASE OF MIDDLE EAR SHOULD BE TREATED MEDICALLY

Ménière's syndrome, an inflammatory disease of the middle ear, should be treated medically rather than surgically, the former consisting solely of a diet low in salt content or with the addition of potassium or ammonium chloride. This is the conclusion of two groups of workers, John H. Talbott, M.D., and Madelaine R. Brown, M.D., Boston, and Maurice N. Walsh, M.D., and Alfred W. Adson, M.D., Rochester, Minn., writing in *The Journal of the American Medical Association* for Jan. 13.

The cause of the disease is not known, although the available evidence suggests that disturbances in mineral metabolism are the causative or contributing factors.

The disorder is marked by intense and sudden attacks of dizziness, nausea, vomiting, loss or impairment of hearing and ringing or buzzing in the ear on the affected side. There are also occasional disturbances of sight. The condition is generally seen in middle life, from the fourth decade on.

Both groups used the dietary treatment for 234 patients with the disease. Relief of many of the symptoms was most impressive, they report. The dizziness was improved or disappeared completely in 62 per cent of the patients. In only twenty cases was it found necessary to resort to operation, involving removal of the whole or part of the middle portion of the eighth nerve. This nerve controls hearing and balance. Only those patients who do not respond to any of the medical measures should be operated on, the four doctors say.

They caution that medical treatment cannot be considered as a cure for all the symptoms, but that many of them do respond dramatically.

WOMEN ARE THINNER

"For many years the public has been steadily bombarded with propaganda concerning the perils of obesity," *The Journal of the American Medical Association* for Jan. 13 points out. "Much of it is based on sound statistical evidence of the shorter longevity and greater liability to certain types of disease shown by overweight people. The inevitable result is now evident in the figures of average weights of women insured in the Ordinary Department of the Metropolitan Life Insurance Company. The tabulation of the average weights at various heights according to age in 1922-1923 as compared to those in 1932-34 showed that in all but a few instances there has been a decline in the average weight for each height at every age. The extent of the declines is not large and is usually from 3 to 5 pounds. It is perhaps surprising, however, that the declines are fairly uniform for the various ages and have been as great for older as for younger women. It would be rash, however, to ascribe the general decline in the average weights of women exclusively to the influence of health education and fashion, since modifications in eating habits represented by a gradual change from the emphasis on quantitative caloric needs to the present consideration of qualitative needs, which stresses the value of so-called protective foods, have also occurred in an apparently quite independent manner."

ORAL AND PLASTIC SURGERY*

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Davis, in his text on Plastic Surgery, calls attention to the three fundamental procedures incidental to plastic corrections. They are free transplants, sliding planes of tissues, and pedicle flaps. I like to think of these procedures as surgical tools, and just as a carpenter uses a chisel, a hammer or a saw as the occasion demands, so the proper selection of the surgical tool or a combination of the tools, such as free transplant, sliding planes of tissue, or the pedicle flap, permits of satisfactory plastic repairs.

The single cleft of the lip (figures 1 and 2) is a typical example where the sliding of planes of tissue is all that is necessary for its correction. No tissue is to be transplanted as there is no shortage of material. The proper pattern in cutting the edges of the cleft of the lip, and sliding the planes of the lip and cheek forward with a careful suturing of the pared edges, permits of a satisfactory correction of this type of defect.

Dr. Blair, of St. Louis, has demonstrated that if the harelip is closed by the third or fourth week of the infant's life, no bone operation is necessary to close the cleft of the alveolar process. The tension exerted by the closed lip on the plastic state of the alveolar process is sufficient to bring the cleft together. Any small defect left can be later closed by a plastic procedure at the time of the cleft-palate operation.

The double cleft lip (figures 3, 4, 5, and 6) presents a more difficult problem than the single cleft. Here we find the premaxilla pushed forward, carrying the center portion of the lip with it. A simple preliminary operation, performed before the attempt at the lip correction, permits moving the premaxilla back into position with the alveolar processes of the maxilla. This consists of taking out a wedge-shaped section of the nasal septum back of the premaxilla. This procedure makes the protruding maxilla mobile; paring of its edges and those of the alveolar process permits fibrous union, holding the premaxilla into place. The precaution in doing this preliminary operation is not to place the premaxilla too far back; a worse mistake is to remove it entirely. Horrible deformities which are very difficult to correct follow the removal of the premaxilla. This has been done in the past by surgeons inexperienced in proper lip corrections. This preliminary operation (figure 5) brings the parts of the lip to be formed in normal relation to each other. The test of a satisfactory correction of the double lip (figure 6) is a well-shaped nose, a proper length to the lip, and a lip which is not depressed in its contour to the rest of the face.

The type of deformity which follows either the removal of the premaxilla or the placing of it too far back in relation to the alveolar processes at the time of the preliminary operation is shown in figure 7. This patient was greatly improved by an operative procedure which the author observed from



Figure 1. Figure 2.

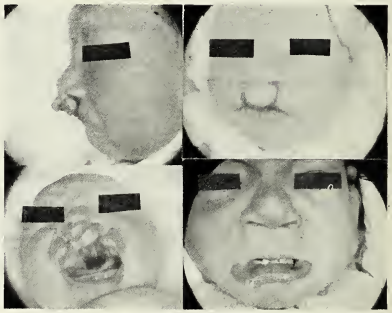


Figure 3 (Top). Figure 4. Figure 5 (Top). Figure 6.



Figure 7. Figure 8.

* Presented before the general meeting of the Indiana State Medical Association at the Fort Wayne session, October 12, 1939.

the work of Dr. Blair. Incisions were made in both buccal sulci from the tuberosity of the maxillae forward to the mid-line and then continued above the columella of the nose. This mobilizes the cheeks and lips and permits them to be sutured in an advanced position on the maxillae. The results of this operative procedure when followed by a properly constructed dental prosthesis are seen in figure 8.

The setting back of ears, a sliding plane of tissue operation, is indicated particularly in the growing child who has pronounced outstanding ears (figure 9). The child becomes the butt of ridicule of his playmates and the result upon the sensitively organized youth is a definite inferiority complex which may have far reaching effects on the development of his personality. This operation is one of the simplest procedures in plastic surgery. The incision is made in the fold back of the ear, close to the head. A section of skin and cartilage from the concha are removed, mobilizing the ear so it can be placed in any desired position when sutured back to the head. The shape of the concha is preserved by packing the external ear with cotton saturated with collodion. This forms a cast which is kept into position for ten days; by that time sufficient repair of the surgical wound has taken place (figure 10).

Correction of nasal deformities is the commonest type of operation demanded by the public to obtain better facial contours. In the competition of modern life many persons develop a definite psychological reaction with a feeling of inferiority because of a real or fancied deformity of the nose. A lawyer who requested a correction of his nasal deformity made this statement: "I cannot argue to a jury. All the time I am proceeding with my case before the jury I fancy that they are looking at my nose, which handicaps me in presenting my case to them." Figures 11 and 12 represent the type of nasal contour for which the patient requests a correction. Figures 13 and 14 represent a type of nose that is too large for a harmonious facial contour.

Figures 15 and 16 illustrate the use of a free transplant of skin for the formation of an eye socket to carry an artificial eye. In a certain percentage of cases, after the loss of an eye, the eye socket becomes completely obliterated. This can be corrected by an incision within the palpebral fissure and by dissection of a pocket made for the reception of a prosthesis. In order to preserve this pocket, it must be lined with epithelium. This is accomplished by molding into the pocket formed a piece of softened compound, as used by the dentist as an impression material. The compound is forced into the pocket and hardened into position by cooling it with cold water. An impression of the newly made eye socket is thus obtained. The material is trimmed to a proper shape so it can be reinserted into the eye socket and covered with a Thiersch graft, the raw surface of which is presented toward the raw surface of the prepared



Figure 9. Figure 10.



Figure 11. Figure 12.



Figure 13. Figure 14.



Figure 15. Figure 16.



Figure 17. Figure 18.

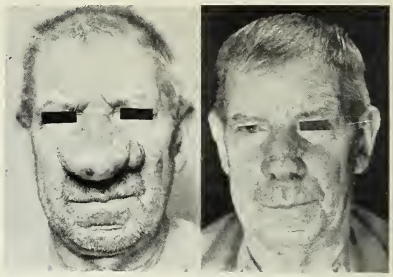


Figure 21. Figure 22.



Figure 19. Figure 20.



Figure 23. Figure 24.

eye socket. The eyelids are then sutured together. In five days the skin graft has attached itself and the compound can be removed. We now have an eye socket lined with epithelium capable of carrying an artificial eye.

Figures 17 and 18 demonstrate the use of a free transplant of rib cartilage in the correction of a nasal deformity resulting from an abscess of the nasal septum with the destruction of the cartilage of the septum. Space does not permit me to discuss the details of the operative procedure. The cartilage to be transplanted must be of the right length and shape. A plaster cast of the nose is made preliminary to the operation. On this cast a plastic material is modeled and the shape of the nose contoured to satisfactory lines. This pattern, which determines the shape of the cartilage to be transplanted, is then transferred into a metal pattern which can be sterilized and used at the operating table as a guide to the trimming of the cartilage transplant.

The case as illustrated by figures 19 and 20 is the correction of a defect produced by the loss of the outer plate of the frontal bone as a result of an automobile accident. The same procedure as discussed in the nasal plastic for the obtaining of a proper pattern for trimming the cartilage transplant was followed.



Figure 25. Figure 26.

Rhinophyma of two degress of enlargement with their correction is demonstrated by two cases (figures 21, 22, 23, and 24). The correction of both cases was made by raising properly designed skin flaps, trimming away the excess of tissue, and suturing the skin flaps back into position.

Figures 25 and 26 illustrate the luetic nose with complete loss of the septum. The correction was made with rib cartilage. The vertical transplant over the bridge of the nose was held in an upright position by a horizontal transplant of cartilage



Figure 27. Figure 28. Figure 29.



Figure 30. Figure 31. Figure 32. Figure 33. Figure 34.



Figure 35. Figure 36. Figure 37. Figure 38.

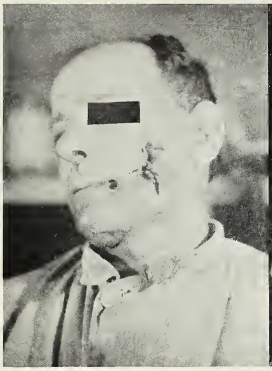


Figure 39.



Figure 40.

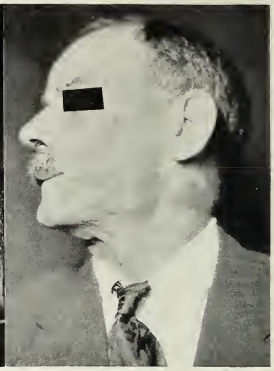


Figure 41.

within the columella. Although the latter was lost because of the limited blood supply within the columella, the vertical transplant had attached itsef sufficiently to maintain the nasal correction.

Figures 27, 28, and 29 demonstrate the use of the third tool of plastic surgery—the pedicle flap. The pedicle flap is used to restore a loss of tissue, taking material from some more remote point and transplanting it into the defect. In this case an arm flap was used to restore the loss of the end of a nose resulting from an automobile accident. The purpose of the pedicle attachment is to keep the blood supply of the transplanted tissue intact until a secondary blood supply can be picked up from the transplanted area. The time necessary for this to take place is from ten days to two weeks. A secondary operation to transfer the tip of the transplant at the end of the nose is still to be done.

Figures 30, 31, 32, 33, and 34 show a case of a badly burned child with extensive scar contraction holding the head down on the chest. This was corrected by the use of a pedicle flap raised from the child's back and transferred around the neck after the scar contraction had been released. Further correction is necessary to obtain a better cosmetic result.

Figures 35, 36, 37, and 38 show an extensive loss of tissue leaving a gaping deformity exposing the nasal cavities and frontal sinus. This was corrected by a pedicle flap lined with epithelium taken from the arm and transplanted into the nasal defect. As one eye was missing and the inner canthi of both eyes were held down by scar contraction, secondary operations were performed to correct these defects and to prepare an eye socket to carry an artificial eye. The injury was the result of a gun shot wound and was characteristic of the many war injuries of the World War.

Figures 39, 40, and 41 show a facial defect resulting from an extensive destruction of a carcinoma of the cheek and alveolar crest. Multiple perforations of the cheek existed after the carcinoma was arrested. This defect was corrected by jumping a pedicle flap from the abdomen. The transfer from the abdomen to the face was accomplished by using the arm as an intermediate blood supply until the flap had attached itself to the inside of the cheek. The cheek was laid wide open during the implantation of the pedicle flap to the masticatory region. After the blood supply of the pedicle flap had been established, the flap was amputated from the arm and the cheek defect closed over the raw surface of the transplanted flap. Ten years have elapsed since the plastic operation was performed and the patient is still free of recurrence of the carcinoma.

Figures 42 and 43 show correction of a facial defect of the cheek and lip resulting from the destruction of a carcinoma of the alveolar crest and cheek. Eight years have elapsed since the carcinoma was destroyed and the plastic repair was done. The patient is still free of any recurrence of his carcinoma.

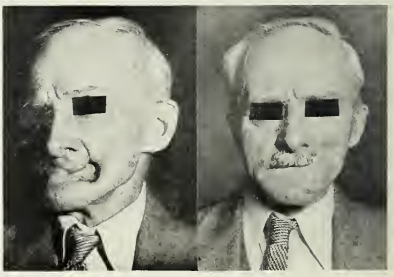


Figure 42.

Figure 43.



Figure 44. Figure 45. Figure 46.

Figures 44, 45, and 46 present a sliding plane operation demonstrating a legitimate face lifting operation. The deformity was caused by von Recklinghausen's disease. Massive fibrous growths were resected by turning down the entire one side of the patient's face by means of an incision along the frontal-temporal hair line. The excess of skin was removed and the skin sutured back into position. The patient refused the correction of the ptosis of the upper eyelid.



Figure 47. Figure 48.

Figures 47 and 48 illustrate correction of a facial defect following a destructive operation for a carcinoma of the maxillary sinus.

Figures 49, 50, 51, and 52 demonstrate correction of chin deformity in a case of ankylosis of the temporo-mandibular joint. After the arthroplasty, we are still confronted with the deformity of the face due to the lack of development of the jaw on the ankylosed side. Rib cartilage was used to restore facial contours.



Figure 49. Figure 50. Figure 51. Figure 52.



Figure 53. Figure 54.

Figures 53 and 54 show a case of microstomia resulting from a lye burn as a child. The small mouth became a problem after the loss of the patient's teeth. In order to construct artificial substitutes, it became necessary to enlarge the mouth so that impressions of the jaws could be taken for construction of dentures and their insertion afterwards. Two triangles of skin and subcutaneous tissue were removed from each angle of the mouth. The base of the triangle was at the orifice of the mouth. The mucous membrane underlying the excised triangle was split and sutured over the raw side of the excised triangles, thus giving a vermilion edge to the extended angles of the mouth.

As the demand for plastic surgery is constantly increasing as a result of the education of the public through the press and radio, it becomes increasingly important for the general surgeon as well as the internist, when called upon for advice by patients, to inform those patients concerning the procedures that fall within the realm of legitimate plastic surgery.

55 E. WASHINGTON ST.

HEART NEUROSES, THEIR DIAGNOSIS AND TREATMENT*

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In this discussion it seems fitting to direct my remarks primarily to that group of physicians who are most often confronted with the problem of neurosis, namely, the physician in general practice. However, we must be conscious that neurosis enters prominently into every branch of medicine as a potential factor in the etiology of disease, or as a concomitant element in the retarded recovery from disease.

No accurate statistics are found on the incidence of neurosis, nor on the incidence of neurosis in which complaints referable to the heart predominate. It has been variously estimated that one-half of the patients seeking medical advice from the physician in general practice belong in the category of the neuroses. If patients with actual existing disease in which neurosis is a factor were considered, then this estimate could conceivably be even larger. Suffice it to say, for our purpose here, that today physicians should be aware that contact with neurotic patients constitutes a large part of their general practices.

Down through the ages medical history occasionally reminds us of the existence of neuroses. These conditions were known to Greek medicine. During the Civil War, and after it, there was some mention of abnormal mental states which were not understood. Again, during and immediately following the World War, there was much talk about "malingerers." It has been since this time that there has developed a degree of understanding of the neuroses and the "malingerers" have become known to be victims of psychic trauma. Many years before this time, Freud had pointed the way but his words went unheeded. His principal teaching stressed the psychologic bases for many physical disturbances. He believed that this relation between psyche and soma existed and has since proven his point beyond question. As a result there is a rapidly growing interest in psychosomatic medicine. It is my firm belief that our failure to practice this principle has been responsible for the even fleeting existence of, and certain measure of success attained by the various cults during the past three decades. May it not also partly explain why "Dr. A" has been apparently less successful than "Dr. B" even though the former had had greater promise of success? For want of a working basis, attention to the psyche became stale and lost in the shadow of the brilliant advancement of scientific medicine.

During this period, students of medicine have emerged from their schooling and interneships each few years with a higher degree of scientific training than in the few years preceding. Most of us here belong to this period. Many of us have experienced the helpless feeling of inadequacy in dealing with our neurotic patients, the key-note to certain failure in the management of these cases. Along with this feeling of inadequacy there develops in the mind of the physician an attitude of disgust and repulsion. At the same time we soon became mindful of the fact that we

* Presented before the Section on Medicine of the Indiana State Medical Association at the Fort Wayne session, October 11, 1939.

were seeing comparatively few patients whose symptoms and physical findings were at all identical with those described in our textbooks. We were much more proficient at interpreting our patient's blood picture than his fears or his ambitions. Only recently have medical schools included courses in psychosomatic medicine.

Various causes for increasing frequency of the neuroses in recent years have been advanced, the most popular being the social and economic crises since the World War. Whether or not we are able to ascribe any specific general causes, we know that anything in the lives of individuals which contributes to psychic trauma is the cause for the neuroses. Specific causes seem to lie close to the things which the individual deems prerequisites to his happiness and contentment. They involve his ambitions, his loves, his frustrations, and to a great degree his estimate of his state of physical health. When any circumstance arises or threatens to arise which will interfere with his happiness and contentment, potential psychic trauma is the result. Such circumstances constitute a favorable medium for the growth and development of a neurosis. Its duration may be momentary and recovery may take place spontaneously without ill effect. It may endure for months or years with the individual floundering hopelessly in the depths of despair. Neuroses of either magnitude usually recover when and if the cause is removed or understood by the patient. Certain of these patients become so hopelessly involved in their own mental processes as to require special methods of management. Such cases are not under consideration here. An understanding of the possible causes constitutes a basis for dealing with the neurotic in the light of our present knowledge.

It should be remembered that patients in a state to receive psychic trauma are in a sensitive state. They are very susceptible to suggestion. There are, therefore, circumstances in which the neuroses may be prevented as well as cured. It has not infrequently come to our attention that some careless remark, or even some gesture made by a physician to one of these patients is the direct cause for a neurosis. It is important that we keep this possibility in mind and especially in dealing with our heart patients.

In recent years nation-wide publicity has stressed the statistical preponderance of deaths due to heart disease over those due to much dreaded pneumonia, tuberculosis, and cancer. Is it not only natural that such publicity should incite concern, if not fear, in the minds of those patients who have been told that they have "heart trouble"? It is equally conceivable that neurotic patients with palpitation, or perhaps precordial pain, would likely interpret their symptoms in terms of some newspaper or magazine article on the subject of heart disease. As White has recently stated, "An uncritical, one-sided publicity has sprouted tens of thousands of cardiac neuroses in otherwise healthy persons and ruined the morale and crippled the lives of thousands of persons with heart trouble, but with no reason to be cardiac cripples."

Attempts have been made to study the physiology associated with the symptoms usually presented in the neuroses. Cannon, in 1915 and 1929, described some of the physiologic responses to pain, fear, rage, and hunger in animals. Although the complete mechanism is not understood, it seems certain that the symptoms are the direct result of over-stimulation of the central nervous system and particularly the cerebral cortex. When the cerebal cortex is subjected to overstimulation by psychic trauma there is an overflow of impulses to the autonomic nervous system with disturbances of four common types:

1. Direct effects through the sympathetic and parasympathetic systems.
2. Spasm of the gastrointestinal tract through the sympathetic and parasympathetic systems.
3. Hyperventilation producing symptoms due to respiratory alkalosis.
4. Hyperadrenalism.

Such reasoning seems to explain some of the more common complaints of our neurotic patients. At least it gives us a working basis. It explains why they so frequently have increased heart rate and blood-pressure, spastic states in the gastrointestinal tract, vasomotor disturbances, and disturbances in respiration. It does not explain why some of these patients complain of precordial pain. Perhaps the pounding of an over-stimulated heart or an enlarged heart against a sensitive chest wall may at times offer the explanation. In any event the symptom of precordial pain without evidence of structural change in the heart presents a most distressing problem. It should be borne in mind that several of the different types of disturbances may be found in the same individual. They should be looked for and properly evaluated.

As patients come complaining of heart trouble it may be of some advantage to the physician in general practice to attempt some simple classification. Let us divide them into one of three groups based upon a structural and functional diagnosis, and into one of two groups based upon psychologic types of neuroses.

Structural and functional group:

1. Those with no demonstrable heart trouble.
2. Those with some structural changes, though not in themselves disabling.
3. Those with definite structural and functional disturbances of slight or marked degree.

Here we are concerned most often with the first two groups, their diagnosis and preventive and curative treatment. In the psychologic group we may consider two common types of neuroses as described in modern textbooks on psychiatry:

1. Normal neuroses or anxiety states. In this type the patient is aware of the exciting cause, i. e., symptoms referable to the heart following the sud-

den death of a business associate from heart disease.

2. Morbid neuroses or anxiety states.

In the latter type the patient is not aware of the true exciting cause for his symptoms because it is attached to some idea in his subconscious mind.

A recent article by Kerr, Gliebe, Soley, and Shock cites a typical example of morbid neurosis in a young man who felt that his illness caused him to be inefficient to the extent that he would be unable to support the girl he wished to marry, whereas the real cause for his symptoms was a subconscious desire to avoid the marriage.

With these ideas in mind we may attempt to make a diagnosis. An exhaustive physical examination and complete cardiac diagnosis are sometimes desirable, though by no means always necessary. I am not here to suggest that every physician must become expert in the fields of cardiology, psychology, and psychiatry. In preference it is my purpose to point out some things to do, and things not to do, which may be added to the usual method of dealing with these patients in general practice. Consultation and extensive laboratory procedures are very desirable, though many times are not possible.

A careful history should be taken in the usual manner, allowing the patient time to talk as much as he wishes even though we may think much of his prattle irrelevant and at times exasperating. Many times we do not have the patience to sit and listen. If we can have the patience to listen in silence and properly evaluate what is said, very often the diagnosis, or a clue to the diagnosis is forthcoming. This is particularly true in dealing with the neurotic patient.

The physical examination should follow in an orderly manner in the usual attempt to discover existing pathology and to properly evaluate any which may be found as a cause for the symptoms presented. We should rule out those diseases which notably affect the heart and proceed to establish the case in one of the aforementioned cardiac groups. Obviously they will usually belong in the group with no cardiac pathology, or in the group with structural heart changes which are not in themselves disabling. During the examination we should be ever mindful that in the neuroses we are dealing with disturbances in the physical, chemical, and psychological status of the individual.

Laboratory tests should be made in accordance with the physician's requirements. At this point it should be mentioned that fluoroscopic examination of the chest and an electrocardiogram have tremendous psychologic effect on these patients. They should be referred to competent sources for this service in the more difficult cases, when possible. In addition to its psychologic effect on the patient, the electrocardiogram will sometimes be of valuable assistance to the physician in deciding the question of structural disease in the heart.

Following the physical examination, it is my custom to have the patient return on the succeeding day at which time the physical findings are discussed. In the less difficult cases the diagnosis has already been made or suspected of being a neurosis. At this time some attempt at a psychological as well as a sociological examination is made. This is not a difficult matter and certainly is not beyond the average physician in general practice. The very act of conversation with the neurotic concerning the state of his intimate surroundings with an attitude of interest and sincerity is the key to the subsequent approach in treatment. It helps to instill within him a feeling of confidence and security. These are absolute essentials to success in treatment. In this intimate conversation the true cause for the neurosis is often found when previous to this time it had only been suspected. The nature of the neurosis in many instances will conform to the type previously mentioned in which the patient is aware of the exciting cause, or to the type in which the cause is attached to some idea in his subconscious mind. In the more difficult cases it is necessary to have the patient return on numerous occasions for further observation. They are sometimes uncommunicative. At times they seem totally unable to appreciate any relationship between their conflicts and their physical discomforts. It is agreed that they are often more miserable than many patients suffering with serious organic disease, hence some drug therapy is desirable during this period of observation. It should be explained to the patient, however, that the drugs are for symptomatic relief only until the true cause for the disturbances can be found. If this is not done the patient is likely to obtain relief and conclude that the doctor has been mistaken and that his distress must have a physical basis. May not a failure to recognize this sequence sometimes explain why patients too often say, "Well, doctor, your medicine seemed to help me for a while, but now I am right back where I was"? Failure in the management of these cases encourages the "doctor shopper." They often seek the cultist, the patent medicine counter, or anything which promises relief.

Treatment of these simple cases is based on the physician's ability to discover the exciting cause of the neurosis and to explain its mechanism in producing the symptoms complained of, with an attitude of sympathy and understanding. An intimate knowledge of psychiatry and psychoanalysis are not vital in general practice; however, the physician will doubtless find much in these fields which will be of value in everyday practice. In addition, there is a certain amount of enjoyment and satisfaction to be obtained by the physician in the application of the principles involved in these fields. There are still physicians who "do not believe" in psychoanalysis. As one writer has said, "As a sailor who does not believe the world is round is obliged to sail his ship, using a round world for his plots and guides, so shall the physician

who does not believe in psychonanalysis be obliged to use that school of thought as one of his adjuncts in taking histories, studying patients and their families, as well as in advising treatment."

Sedative drugs are of distinct value in these cases. They act to raise the threshold to all stimuli, thereby reducing autonomic overactivity. In addition, they tend to induce sleep which is often much needed by the neurotic. Phenobarbital has been found to be the most useful in my hands. The dose must be determined in each individual case; however, it has been found that neurotics require larger doses usually than the normal individual.

Neurotic patients who have simple irregularities in heart rhythm and those who have some structural heart changes which are not in themselves disabling can usually be convinced of their unimportance by proper explanation. It should be remembered that the atropine series, so commonly used in treating neurotic spasticities of the gastrointestinal tract, may at times cause sinus tachycardia.

Not infrequently we find causes for neurosis from which it is impossible for the patient to escape, such as poverty, or some hideous deformity. These patients can often be taught to endure these unfortunate circumstances by acquiescence. Likewise we may often encounter symptoms which we are unable to relieve, but which we can teach the patient to endure as an insignificant nuisance which may some day disappear.

The matter of preventive treatment should be regarded as a moral obligation by every physician. Unfortunately some physicians cling to the policy of terrorizing patients in the presence of disease whether it be of serious nature or not. Others are careless or thoughtless in their remarks or gestures in the presence of heart patients. These physicians are the frequent cause for the increased number of heart neuroses. Still others face these problems with an attitude of inadequacy and tell their patients that they must forget their ailments or that it is up to them to overcome their own nervous symptoms, which, obviously, it is impossible for them to do.

In this discussion it has not been my intention to offer anything new or original. Preferably it has been my purpose to enter a plea to the physician in general practice to greater fulfillment of the ideal of the true physician by an intelligent attempt at the alleviation of human suffering wherever it may be found. It is hoped that the suggestion of a few of the principles involved in the diagnosis and treatment of the heart neuroses may stimulate a renewed interest in the rehabilitation of the other types of neuroses as well. Failures will be many. Successes will be often enough, though not as often as we may desire. The successes will constitute an increased number of most grateful patients and a source of greater satisfaction to the physician in the practice of medicine.

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THE SURGICAL IMPORTANCE OF RENAL ANOMALIES*

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From both a medical and surgical standpoint, no other group of anomalies are as significant as those involving the upper urinary tract. Unquestionably abnormalities are encountered here more frequently than in any other system of the body. Gutierrez, who has written extensively on the subject, attributes fully forty percent of all pathologic conditions of the kidneys and ureters to congenital anomalies. That this is no exaggeration of the facts will be readily admitted by most urologists. The greatest proportion of the entire group present themselves to the physician not because of symptoms directly due to the anomaly, but because of obstructive manifestations due to pyelonephritis and stone formation. The frequency of such anomalous conditions found at autopsy reveals that not all produce a pathologic lesion, but must be considered as potential disease entities which may require surgical treatment. It is constantly reiterated and with good reason that the common etiologic factor of chronic pyelitis in children is a congenital malformation. Clinical studies on a large series of cases show the incidence to be anywhere from two to thirteen percent. They are thought to be found more often in infants and young children than adults because many of these anomalies tend to shorten life.

The urinary apparatus, like other organs, depends upon the integrity of the primitive elements from which it is derived for its complete normal development. However, the complexity of evolution in this system exposes it to greater chance of developmental arrest or abnormality than occurs in other systems of the body. Briefly reviewing the transition of the renal anlage into the urogenital apparatus will demonstrate the changes which may give rise to some of the anomalies.

The kidney is evolved from a series of primitive renal organs, the pronephros, the mesonephros and the metanephros, the latter replacing each of the former in order. A static period in any of these

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changes on one side might result in complete or partial absence of the kidney, renal aplasia, or hypoplasia. The permanent kidney is a product of development of the metanephros. During the fifth and sixth weeks of life there is a migration of the fetal kidney from the pelvis upward to its ultimate adult lumbar position. In addition rotation occurs along the longitudinal renal axis. As the kidneys pass up through the arch of the iliac arteries, there are ample opportunities for retarded ascent which results in ectopia; for fusion of the organs which gives rise to horse-shoe or fused kidneys; or lack of or incomplete or even excessive rotation. Under the last mentioned circumstances the pelvis may assume either an anterior or posterior position instead of the normal median relationship. In the same fashion, any arrest in development in the Wolffian duct would maintain in a most primitive state the entire excretory system on that side. In the early weeks of embryonic life there is a projection of the ureteral bud from the Wolffian duct into the nephrogenic mass. Radasch is of the opinion that renal aplasia is the direct result of failure of the ureteral bud to appear or to its lack of development. Bifurcation of the ureteral bud gives rise to one of the most common renal anomalies, the duplicated or multiple ureters or pelvis.

Vascular anomalies of the kidney are found in endless variety. Under normal conditions the renal artery arises from the aorta and passes anterior to the vena cava and divides into three branches. Not uncommonly accessory vessels travel to either pole. The renal arteries may assume any number or position. It is frequently observed that when the kidney is abnormal, the vascular supply is often anomalous. Clinically these are seen to constitute the greatest percentage of renal abnormalities and in themselves are often of minor importance except when they produce obstruction or require special consideration in the operating field.

Recently we have encountered a number of anomalies which have renewed our interest in the subject. Because we felt that we were meeting with more than our share of congenital abnormalities, Dr. Montgomery reviewed the available autopsy material and has supplied us with the following figures:

RENAL ANOMALIES FOUND IN A SERIES OF 598 AUTOPSIES PERFORMED AT THE BALL MEMORIAL HOSPITAL

(1) Upper urinary tract		
Vascular	16	2.7 %
Ectopic kidney	4	.8 %
Hypoplastic kidney	3	.5 %
Duplication renal pelvis	10	1.6 %
Solitary kidney	1	.01%
Crossed ectopia	1	.01%
Horse-shoe kidney	4	.8 %
Polycystic kidney	1	.01%
(2) Lower urinary tract	11	1.8 %
	51	8.3 %

It will be noted that in this group of 598 cases examined routinely at post mortem, anomalies of the urinary tract were present in 51 cases or 8.3%. Of this number 16 or 2.7% were in the group of vascular abnormalities, while 24 or 4.0% comprised anomalies of the upper urinary tract exclusive of the vascular group and 11 or 1.8% involved the lower urinary tract.

The most common abnormality, therefore, was seen to be found in the renal blood supply. Next in frequency were those of the excretory apparatus (calyces, pelvis and ureters) of the kidney, of which there were 10 or 1.6%; anomalies of position, of which there were 4 or .6% pelvic kidneys and 1 case of crossed ectopia; 5 cases or .8% of anomalies of form, of which 4 were horse-shoe kidneys and 1 unilateral polycystic disease; 3 or .5% anomalies of size, all of which were hypoplastic kidneys; and 1 or .01% anomalies of number, a solitary kidney.

It is generally found that a high percentage of anomalous kidneys reveal on microscopic examination a marked degeneration of the renal parenchyma. Sangree and Morgan, in a study of fifty cases of congenital kidneys, found 86% had nephritis. Twenty-five cases of horse-shoe kidney showed a chronic nephritis in 80.5%, and in the most common renal anomaly, unilateral duplication of pelvis and ureter, 84% suffered from chronic nephritis. Calculi were present in 2%. In the series of horse-shoe kidney, stones were demonstrated in 29%.

I would like to present several interesting cases which will demonstrate the importance which these anomalies bear to the surgical approach to renal pathology.

CASE REPORTS

Case 1. A colored female, age 34, was admitted to the medical service because of persistent indeterminate fever of 103°-104°. During the previous six weeks she had an upper respiratory infection from which she had apparently recovered. There were no other subjective symptoms, and the history was otherwise negative. On physical examination, the head and neck were negative, the lungs were clear, and the heart normal except for a shrill systolic murmur heard over the apex. The liver was felt two fingers below the costal margin. There was no demonstrable costo-vertebral tenderness. The temperature was 103°F., pulse 110 and of good quality, and respirations 22. The blood pressure was 130 systolic and 70 diastolic. Urinalysis showed pus ii, rbc's iv, granular casts ii. Urine culture gave a streptococcus. Examination of the blood revealed: hemoglobin 36%, RBC 3,300,000, leukocytes 9,000 and 9 band forms in the smear. The sputum was negative, the serology was a 1-plus Kahn. Tests for typhoid, paratyphoid, dysentery, undulant fever and malaria were negative. The stool examination was negative. Repeated blood cultures were sterile. Cystoscopic examination was negative except that an impassable obstruction was encountered about 10 centimeters above the bladder on an attempt to cathe-

terize the left ureter. No contraction of the left orifice nor eflux was seen from that side. Intravenous urograms revealed excellent excretion of medium on the right with a normal pattern of a hypertrophic kidney. There was no visualization on the left and no definite renal outline although the area was obscured with gas. A diagnosis of functionless left kidney was made and surgery was advised. On exploration through a left posterolateral incision, no kidney could be found until a careful examination of the retroperitoneal fat disclosed a rudimentary kidney about 4x3x2 centimeters. The ureter consisted of a fibrous cord extending distally from the inferior border of the infantile pelvis. There was present a moderate sized renal artery. A nephrectomy was done, although not with any view of improving the patient's condition.

Convalescence was uneventful but picket fence type of fever persisted. Three weeks later the abdomen was explored because of a suspicion of tuberculous peritonitis. Except for a chronic bilateral salpingitis, the abdominal viscera were normal. The patient recovered from the abdominal operation and the fever continued. This individual was transferred to a hospital in another city and succumbed there some weeks later. No post mortem findings were ascertained.

Case 2. This patient was a well developed, well nourished, 49 year old, white man who was first admitted to the hospital in November, 1936, when he complained of gross hematuria of two weeks duration, intermittent at first, later constant; he complained also of slight weight loss, and of having a "tired feeling" for several months. Past and family history were negative. There was nothing of note in the physical examination or the laboratory tests. On cystoscopic examination, only one ureteral orifice could be found and that was in the midline in the floor of the bladder; no trigone could be recognized. Bloody urine was seen to be coming from the ureter. The bladder otherwise was normal.

An intravenous urogram was done and a diagnosis was made of tumor of a right solitary kidney. The patient returned six months later because massive hemorrhage from the kidney had caused blood clots in the bladder and blocking of the urethra. Until his death there was always blood in the urine on microscopic examination. Occasionally there was gross hemorrhage which usually followed some unusual strain. The patient was able to continue with his work most of the time until June, 1938, when he suffered a severe gross hemorrhage. He was admitted to the hospital two days later. Prior to this time there was no mass palpable. On examination there was a large mass present in the right flank. The patient gradually developed an inability to retain food, and became more cachechtic and anemic. Death occurred four months later, in October, 1938.

At autopsy, an adenocarcinoma was found involving practically the entire right kidney and weighing 1300 grams. The pelvis was large as could be expected in a hypertrophic kidney, but was not markedly dilated. There was a normal right ureter. A normal adrenal was found on the left. By tracing the blood supply, rudimentary renal vessels were found which led to a small nodule, consisting chiefly of fat and fibrous tissue, which measured ½x1½x2 centimeters. It was attached by a narrow cord, in which no lumen could be found, to the top of the left ureter. The left ureter was 24 cms. long and irregular in diameter. It ended in a blind pouch on the posterior surface of the bladder. The right ureteral orifice was in the midline and there was no trigone present. No left ureteral orifice was found and there was no indication that there had ever been one.

Case 3. A girl, 6½ years of age, came to the clinic because of urinary incontinence. This had been present since birth and occurred only in the daytime. Her birth and development had been entirely normal and there was no gross evidence of any congenital abnormality. Control of the rectal sphincter was normal. Physical examination was entirely negative except for a somewhat enlarged urethral meatus from which there was a constant dribbling of urine. The rectal sphincter had good tone. A roentgenogram of the spinal column revealed spina bifida occulta of the last lumbar and first sacral vertebrae. On urinalysis, pus, grade 2, was found. In the intravenous urogram a normal kidney on the right side and a duplicated type of kidney on the left were visualized. The lower calyces, pelvis and ureter were normal on the left side, but the upper pelvis was not visualized. From the intravenous urogram, it was suspected that the ureter from the upper half of the left kidney drained into the urethra distal to the sphincter, and this diagnosis was verified on cystoscopic examination. The ectopic urethral orifice was situated in the floor of the urethra just distal to the sphincter. A lead catheter was passed 1.5 cms. up the left ectopic ureter, and a ureterogram was made outlining the lower one-third of the ureter which was dilated grade 4. Following preliminary treatment, with mandelic acid, of the infection that was present in the left kidney, surgery was done. Complete duplication of the pelvis and ureter was found. The lower portion of the kidney and the ureter from the lower pelvis appeared normal. The upper half of the kidney was very thin and little renal parenchyma remained in it. The ureter to this segment was redundant, thin-walled and dilated to 1.5 cms. in diameter. The pelvis was dilated both extrarenally and intrarenally. The renal pedicle was exposed, and the vessels running to the upper pole were ligated, following which hemine-phrectomy was performed. Approximately 19 cms. of the dilated ureter was removed. The patient's postoperative convalescence was entirely satisfac-

tory and she was dismissed from the hospital on the fifteenth postoperative day. A postoperative urogram showed that the remaining portion of the left kidney was functioning well. There was no further leakage of urine.

DISCUSSION

The surgical importance of renal hypoplasia has become well recognized in recent years. In 1911, McArthur reported a case in which he performed a nephrectomy for unilateral tuberculosis. Death followed due to renal insufficiency and at post mortem revealed a small infantile type of kidney which, although it secreted urine of good concentration, was unable to assume full functional hypertrophy. A similar case was reported by Magoun in 1932.

In the first case described, the kidney was undoubtedly hypoplastic, although the ureter was not patent and the kidney was non-functioning, both of which are characteristic of the aplastic kidney. The parenchyma, however, was normal, a rudimentary pelvis was present and the renal pedicle was demonstrated. The hypoplastic kidney when functioning, produces a normal secretion, a good urea and phenosulfonphthalein excretion. The aplastic kidney is functionless and ordinarily does not visualize. The former is, therefore, a greater surgical hazard, since if the opposite kidney is removed, the hypoplastic organ is incapable of undergoing the functional hypertrophy which is necessary to sustain life.

In the second case of carcinoma in a solitary kidney which was described, the aplastic kidney was readily recognized. This precluded surgical removal of the carcinoma of the kidney. It is notable that the man lived two years after the diagnosis was established. This was the case of Dr. John H. Bowles and is the second case reported in the literature, Burrell having reported a similar condition in 1936.

We must remember that the malformations of the upper urinary tract are not infrequent, that they commonly are associated with serious pathologic conditions, and their recognition is possible with careful investigation.

DISCUSSION

LALL G. MONTGOMERY, M. D., (Muncie): Doctor Schulhof has just given us a very disturbing paper and it would be very consoling if we could think that he and the workers that he quoted have exaggerated. We know that they have not exaggerated because all this work has been well authenticated and repeated again and again, so we must accept the unfortunate fact that no congenital anomalies are as frequent as those of the urinary tract. We must remember that almost one out of ten of the patients that we see in our offices have some structural congenital anomaly of their urinary apparatus; that of our patients who have or will develop urinary tract disease almost half develop this disease because they have congenital lesions of one kind or another; that of the patients which we see who have such congenital anomalies, probably more than three-quarters of them have active renal disease whether they have symptoms or not. All these irrefutable facts conspire to make congenital lesions of the kidneys and related structures a matter of universal importance in all branches of the practice of medicine, and when we single out the practice of surgery, as Doctor Schulhof has done today, we are simply choosing a specialty in which the integrity of the urinary tract is of even more dramatic and immediate importance than in other medical fields. Let us not forget that the responsibility of the surgeon in the recognition of possible damage to the patient's urinary tract is a divided responsibility which all practitioners of medicine must assume.

Since the autopsy material in our hospital was reviewed for Doctor Schulhof, we have been making a special effort to detect anomalies of the urinary tract and although we have performed only twenty postmortems in the interim we have been unpleasantly impressed with the increased frequency with which we have encountered these lesions. In eleven of the twenty cases we found one or more anomalous conditions. Seven of these were simply anomalous blood vessels; one was a case of hypoplastic kidney in a fifty-year-old man who died in an acute exacerbation of a chronic glomerulonephritis; one was a case of bilateral polycystic kidneys in a newborn infant; one was a case of horseshoe kidney in an infant of one year; and one was a case of bilateral anomalous renal pelves. There is no doubt that in this small series we have had more than our share of renal anomalies since even the most hardened calamatist would not claim that half of the population have abnormal kidneys, but in view of these findings we must admit that in the larger series of our autopsies which Doctor Schulhof cited we must have overlooked many anomalies which might have been found with more careful dissection. Another point which paints the picture still darker is that we have not mentioned the occurrence of simple renal cysts. At one time these were considered to be neoplastic in origin but it is now generally conceded that these represent another form of congenital defect. If we were to include this lesion in our figures we would probably find that the great majority of patients would have to be included in our classification of congenital renal defectives.

It must be admitted that the physician, and especially the surgeon, must be prepared to take into account the possibility of congenital urinary tract anomalies in all patients, and that in a most unfortunately large number such anomalies will be present with their attendant danger to the patient's life. We must also admit that we cannot expect the patient to help us very much in the diagnosis since most of the anomalies, especially those of the upper urinary tract, do not cause symptoms until they are far advanced.

As a pathologist I can do nothing but make the

picture more dreary and assure you all that congenital lesions of the urinary tract are so frequent that every physician every day must see them in his practice. However, we may take courage from the fact that modern urologic investigative methods developed in the past three decades have given us the means of forewarning ourselves of possible dangers to the life and health of our patients and by these means we may forearm ourselves in treating these patients whether surgically or medically.

TULAREMIA

REPORT OF TWO CASES

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These two cases were in women, a mother of fifty and her daughter of thirty years of age. On the first day of the hunting season, the mother's husband brought in some rabbits and cleaned them. The mother cut some of them up and told her daughter, who was visiting her, to finish cutting them up and to take the remainder home with her.

On November sixteenth, the mother came in complaining of aching all over, of having chills and fever. Her temperature was 103. She had a swelling of the lymphatic gland above the elbow, about the size of a small orange, which was tender. There was also some tenderness in the right axilla.

At first it was thought that she had a streptococcic infection, and inquiry was made about a sore on her hand. Upon inspection, there was seen a small ulcer on the little finger of the right hand which the patient made light of. She was given sulfanilamide, the ulcer was treated, and she was told to use hot Epsom salt solution packs to the swelling above the elbow.

On November seventeenth, she returned with her daughter. The mother seemed to be much better, and her daughter was suffering from a similar condition with an ulcer on her ring finger. Her symptoms were very much like those of her mother. In two or three days, the mother's symptoms had grown worse. I continued symptomatic treatment, and saw the patients every two or three days until December first. In the meantime, a diagnosis of tularemia was made after the history of having handled a rabbit previous to the onset of the disease was obtained.

Their conditions did not improve, and on December first each patient was given an ampule of metaphen. I repeated this dosage every second day until four doses had been given. By the time the third dose had been given, all symptoms had vanished except weakness. All swelling rapidly decreased and the ulcers healed satisfactorily with one per cent gentian violet solution.

The swelling above the elbow in the mother went on to suppuration and had to be opened on December twentieth. At that date, mother and daughter had completely recovered and have had no further symptoms.

ABSTRACT

MALFORMATIONS AT BIRTH ARE NOT DUE TO DISEASE OF PARENTS

Malformation at birth seems to be dependent on conditions which affect the germ cells prior to conception and is probably not influenced by factors which arise during pregnancy, an editorial in *The Journal of the American Medical Association* for Jan. 13 concludes from a study made by D. P. Murphy, M.D., Philadelphia.

The study also indicates, the editorial says, that malformations are not due to syphilis or any other disease of the parents.

From an analysis of information on death certificates in Philadelphia from 1929 to 1933 inclusive, among which were recorded 1,476 congenital malformations, of which 890 were adequately confirmed, it was shown that the frequency of birth of subsequent malformed offspring was twenty-five times greater in families already possessing a malformed child than in the general population.

"Relation was not demonstrated," *The Journal* points out, "between frequency of malformation and such factors as illegitimacy, economic or social status, chronic illness at the time of conception, pelvic disease prior to conception, season of the year, health of the mother or placenta praevia. The older the mother, however, the more likely was she to give birth to a congenitally deformed child. The later born children in a family are more likely to be congenitally malformed than are the first born. The malformed child is less likely to go to term than the normally developed child. Periods of relative sterility are likely to precede the births of congenitally malformed children. In families possessing two or more malformed children, the defects in the subsequent offspring are identical with those in the previous defective in approximately 50 per cent of instances. The diets of the mothers of defective children are found to be significantly lacking in adequate amounts of calcium, viosterol, iron and vitamins B, C and D.

"The evidence indicates that the couples who give rise to malformed offspring are reproducing inefficiently. Efficient mating, in the sense employed, is considered that in which reproduction occurs at will; all offspring are carried to term, are born alive and are normally developed both mentally and physically.

"Parents of a congenitally malformed child have a greater chance of having another malformed child than other couples and the chance is increased if one or both of the parents are well advanced in years.

"The conclusions reached by this study are well documented and, although requiring confirmation, of course, can serve as the basis for much intelligent professional advice to the unfortunate parents of malformed children."

ECCYESIS OR ECTOPIC PREGNANCY*

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In many instances ectopic gestation is the most spectacular in its pathology, the most sudden in its onset, and the most tragic in its termination of any of the acute abdominal lesions; expectant motherhood suddenly terminates in a fatality.

Eccyesis, or extra-uterine pregnancy, is the condition which arises when a fecundated ovum lodges and imbeds itself in any tissue outside the cavity of the uterus, nidation proceeding in the aberrant site for a variable period.

Ectopic pregnancy was evidently unknown to the ancient Greeks or Romans for there is no allusion to it in ancient works. The first recorded case was by Albusasis, an Arabian physician living in Spain in about the middle of the eleventh century. He reports seeing the escape of parts of a fetal body from the abdomen of a woman by the process of suppuration.

The first case of abdominal surgery for relief of pregnancy, whether intra- or extra-uterine, was by Jacob Nufer in 1500. The first case in America was reported by Dr. John Bard, New York City, in 1759.

It was early recognized that the removal of abdominal fetuses and a ruptured tubal pregnancy were very different in form of treatment and outcome.

Although Dr. Horbert in 1849 first suggested abdominal surgery as treatment for the ruptured tubal pregnancy, Lawson Tait, in 1883, was the first man to do it.

The incidence of extra-uterine gestation is very hard to determine because of many doctors.

Varieties of extra-uterine pregnancy are many, for the ovum may be arrested anywhere from the ovary to the uterine cavity or distal to the cavity in the genital tract. The sites of implantation in the order of frequency of occurrence are: (1) isthmal, (2) interstitial or cornual, (3) ampullar, (4) tubo-ovarian, (5) ovarian. There may be simultaneous rupture of both tubes. Also there have been found twins and triplets in tubal pregnancies.

The causes of extra-uterine pregnancy are listed as obstructions of the tubal lumen from without; obstructions of the tubal lumen from within as when salpingitis destroys the cilia; anomalies of the tubal lumen, as accessory tubes; decidual reaction in the tube; and growth outside to such extent that when it enters the tube its size precludes its transit through the lumen.

The cause of ovarian pregnancy may be due to the fertilization of the ovum in situ. The cause of primary abdominal pregnancy is obscure.

The possible terminations of primary ectopic pregnancy are early death of the ovum with complete resorption and restoration of the pre-pregnant condition; death of the ovum with formation of a tubal mole; tubal abortion; or rupture of the pregnant tube into the peritoneal cavity or in the folds of the broad ligament. The growth and development of the embryo may proceed to term, when either the fetus dies as a result of nutritional failure or is delivered by section; if the pregnancy is interstitial the fetus may be extruded into the uterine cavity, the placenta remaining attached to the cornual wall, and the pregnancy may terminate by spontaneous vaginal delivery as in normal gestation, the placenta being normally expelled.

The termination of secondary pregnancy may be expulsion into the abdominal cavity, the placenta remaining in the tube. The fetus must be removed or it goes on to death, suppuration, necrosis, lithopedion or adipocere formation.

The ovarian pregnancy may terminate by rupturing into the peritoneal cavity with hemorrhage and death of the fetus; or by rupture with secondary attachment of the ovum in the abdomen secondary to a primary ovarian gestation.

There may be recurrent extra-uterine pregnancies. There can be combined intra- and extra-uterine pregnancy. There can be extra-uterine pregnancy complicated by fibroids and cysts, pelvic inflammations, toxemias, or eclampsia. Cervical pregnancy may occur. There may be hemorrhage from the ovary or tube simulating rupture of an ectopic which occurs in young girls sexually excited and is due to rupture of graffian follicles.

The diagnosis of extra-uterine pregnancy in those cases where there is a tubal pregnancy without the leakage of blood is said to be a lesion incipient in all respects, provoking little or no reaction upon the physiology of the patient, and presenting only the most elusive details upon which a diagnosis may be based. In consequence the diagnosis is made only in isolated cases.

The symptoms in these cases are amenorrhea with some pain, and upon vaginal examination the cervix is softer; the involved tube rarely can be felt.

When there is a beginning tubal abortion or minute rupture permitting a small quantity of free blood to come into contact with peritoneal surfaces, the diagnosis should be made with a clear and complete history of a missed period, spotting of a black or brown discharge, and pain.

A large vaginal hemorrhage will differentiate intra-uterine pregnancy with threatened abortion from extra-uterine pregnancy which rarely gives a large amount of hemorrhage. If there are signs of extra-uterine pregnancy associated with a large

* Presented before the Section on Medicine of the Indiana State Medical Association at the Fort Wayne session, October 11, 1939.

vaginal hemorrhage, then extra-uterine pregnancy should be suspected with a simultaneous intra-uterine pregnancy.

The concomitant signs of pregnancy such as amenorrhea, morning nausea and vomiting, pain and tingling of the breasts with appearance of colostrum, increased pigmentation of skin areas, softening of the cervix, enlargement of uterus, cyanosis of vaginal mucosa, increased anteflexion of the uterus, and positive tests such as Aschheim-Zondek, or chemical reactions of the urine showing pregnancy, and frequency of urination, all may be valuable in the diagnosis of pregnancy.

The pain may be due to different causes. It may be that the ovum, which is a foreign body, causes pain by the tubal peristaltic contractions trying to expel it. The dullness may be due to the sensitiveness of the peritoneum to free blood. The blood clot in the cul-de-sac of Douglas causes the painful defecation. The distension of the tubal wall or folds of the broad ligament may cause the pressure pain.

Pelvic disease is of definite etiologic importance if present together with pelvic operations which may leave adhesions.

Absolute sterility is not definitely associated with the occurrence of ectopic pregnancy. Relative sterility, especially the one child type, on the contrary, is a significant point and should be regarded as moderately affirmative. The passage of a considerable interval of time between the last intra-uterine pregnancy and the present suspected one is important in the diagnosis.

In the beginning rupture or tubal abortion, the physical findings are frequently definite enough to be considered pathognomonic. There is a tender mass occupying the site of one or the other tube, with or without a doughy fullness in the posterior vaginal fornix. The palpable evidence of a blood clot in the cul-de-sac of Douglas occurs frequently. Traction on the cervix or active manipulation of the uterus greatly aggravates the pain and tenderness.

Generally with a ruptured ectopic pregnancy the uterus is thrown into anteflexion while inflammatory conditions with adhesions pull it to retroversion.

Hegar's sign is of negative value unless there are other signs of intra- or extra-uterine pregnancy. The passage of masses of decidua or complete decidual casts are of great positive value (these may be missed and are passed with intra-uterine pregnancy when there is death of the embryo).

Gentle bimanual examination is very important, for the rectus muscle on the affected side is usually somewhat rigid. There may be some abdominal distension.

The attacks of pain are accompanied by nausea and vomiting in about one-half the cases. The pulse is usually slightly elevated to 86 to 92. The temperature is usually around 99 to 102 degrees. The blood picture shows a mild leukocytosis of 10-12,000, and with rupture there is no change of red blood cell count or hemoglobin, but there is a leukocytosis.

The sudden tragic type is rare but the usual kind is that in which the complaint is of menstrual disturbances and a short attack of abdominal pain, followed by uterine bleeding. The pain may, and frequently does, entirely disappear for a period of days or weeks, to recur in repeated exacerbations until the case terminates in one of these ways: by a sudden violent attack of pain, with massive intra-peritoneal hemorrhage, shock, and collapse; or with a continuance of the attack of pain, with slow hemorrhage, gradual severe anemia, infection of the hematocele and death from exhaustion or sepsis. Recovery results from successful surgery. A third termination is the death of the ovum and absorption of the clot or abortion. These usually form adhesions and sooner or later require surgical treatment.

Dr. Price calls the cornual end of the tube the coroner's end. He believes that the amount of hemorrhage is in direct relation to the proximity to the uterus.

In the asthenic type, there is lancinating pain, nausea and vomiting which is followed by syncope, collapse and shock. The pulse rate steadily increases and volume decreases; the skin is cold and clammy; temperature is subnormal; features are pallid; there is extreme anemia, rapid and shallow respiration, contracted pupils, facies of anxiety, intense restlessness, thirst and air hunger; mentality is unimpaired and often sharply acute.

Blood pressure remains low and the pulse tension is constant. (In intra-peritoneal hemorrhage the pulse pressure is constant while in shock there is an irregularity between systolic and diastolic blood pressure from time to time.)

Ectopic pregnancy may be differentiated from a cyst by a history of no amenorrhea or irregular bleeding. But with torsion of the cyst you may get violent pain with a slight elevation of temperature and some leukocytosis. Cysts are usually larger on vaginal examination.

Retroversion plus ectopic pregnancy presents a difficult problem. Histologically a diagnosis is made on finding a villus or embryo or ovarian syncytium. There is in ectopic pregnancy a pallor of the cervix and a bluish discoloration of the vaginal mucosa. Also there is found a bluish-black discoloration of the umbilical region.

In the sthenic type, the physiological activities are stimulated. The pain becomes generalized and the patient rallies from the syncope. Temperature varies from 101 to 103 degrees with a full strong pulse of good volume. This is the type easily confused with acute salpingitis and is only differentiated by a history of inordinate tenderness.

The diagnosis of a long standing and untreated ectopic gestation is readily confused with chronic salpingitis except when an ectopic history is present.

The differentiation between interstitial or cornual pregnancy is very hard. Neither is the ovarian

pregnancy distinguishable. It is possible for abdominal pregnancy to be primary but it is usually considered as secondary to rupture. This type is distinguishable since the fetal mass is more noticeable because the uterine wall does not intervene. It is easy to move the fetus from one quadrant to the other. The cervix is soft and vaginal examination shows a small uterus. There is no Hegar's sign or ballotment present. There are peritoneal irritation symptoms of nausea and vomiting with alternating constipation and diarrhea. There may be frequent and painful micturition.

Should the fetus die, it will cause a low grade infection with a subfebrile temperature and a profound toxemia. But should the fetus live, there will be a false labor and death of the fetus with absorption of the fetus and accompanying symptoms. The diagnosis of a lithopedion or adipocere formation is accomplished by x-ray.

Tubal pregnancy should be suspected when ectopic signs occur simultaneously with normal pregnancy. Vaginal bleeding is usually absent in these cases. The best thing to do is to watch the temperature, pulse and blood pressure for evidence of hemorrhage.

In the differential diagnosis of ectopic pregnancy, things simulating partial or incomplete rupture of the extra-uterine sac are arranged in order of occurrence: 1. Intra-uterine prgenancy with threatened abortion. 2. Hemorrhage from the tube or ovary, not in relation to pregnancy. 3. Acute salpingitis. 4. Acute appendicitis. 5. Twisted pedicle of an ovarian cyst. 6. Ruptured gastric or duodenal ulcer. 7. Ureteral or renal colic. 8. Dietl's crisis. 9. Diverticulitis. 10. Volvulus. 11. Enterolith or impaction of the bowel.

Differentiation is very difficult at times, for the pain of ectopic pregnancy at onset changes in a few hours from lancinating sensations to a severe, dull, generalized abdominal distress. In intra-uterine abortion the pain is cramp-like, intermittent, and steadily grows more severe as the uterine contractions increase in frequency and force.

If the menstrual history has been regular, then a delay means something although the delayed period is found in nearly all cases. This flow differs much from the normal period; it is unlike hemorrhage in color and quantity. The extra-uterine flow is not so excessive as that of miscarriage. This ectopic discharge is, as a rule, continuous but may have periods of intermission.

The pain is sharp and very severe in many instances and is recurrent. It is described as lancinating, darting through the patient with a persecuting fury. These pains are sufficiently severe to cause the patient to faint, and this may be the first and only warning of the tragic condition and, further, it may be her last consciousness of this life. She is often awakened from a happy expectancy of motherhood based on the missed period to a realization of this treacherous condition.

There is seen a mental aberration in the patient, and there is increased temperature due to the absorption of the blood clot. It amounts to only a degree or so. At first it may be subnormal. The pulse varies with the amount of shock and hemorrhage from normal to imperceptible.

There is a lower central distension and an abdominal tenderness but not as marked as it would be with an acute pelvic inflammation.

Bimanual examination may show a mass in the vaginal fornices which is semisolid in type. The pus tube is more tender. Cervical tenderness is an almost constant feature of ectopic pregnancy while this is not true of a pus tube. By lifting up on the cervix of an ectopic patient, much pain is elicited.

The pain of ectopic pregnancy is usually localized at first in a fossa while intra-uterine pain is central. The presence of free blood in the cul-de-sac, the rectal tenderness and painful defecation is absent in the intra-uterine abortion.

Bleeding of intra-uterine abortion is profuse and bright red. The temperature of ectopic pregnancy is higher unless abortion was induced and infection was introduced. Extrusion from the uterus of an embryo or chorion is definite aid or proof. A positive Wassermann indicates the possibility of abortion.

The fever of acute salpingitis is higher than that of ectopic pregnancy. The history is important and the presence of positive gonococcus smears is indicative. Concomitant signs are absent with acute salpingitis. The pain is slow in arising.

The patient showing signs of having an ectopic pregnancy should be typed and if possible blood donors should be arranged before the advent of surgery.

The time given to operate a case of ruptured ectopic pregnancy is the first hour irrespective of her condition; even though she be shocked, pulseless, and unconscious, she is always surgical.

The surgeon's ability and the environment greatly modify the mortality. The reasons that the operation should be performed immediately are: (1) hemorrhage may still be active; (2) foreign body blood clot may be causing shock; (3) a very ill patient from ectopic stands surgery well.

This is a principle of indication and tolerance to surgical remedy. The physiological abdomen will not tolerate the surgical hand; the pathological one permits great intra-abdominal privileges—pathological charity. In a series of several hundred cases of ectopic pregnancy, operating all, even the pulseless, shocked, and unconscious, only two resulted in death.

Good medical management demands a speedy, accurate differential diagnosis in order to secure early surgery.

The conclusions are that ectopic pregnancy is surgical at the first hour of diagnosis and is *only surgical;* there is no medical treatment and there is no possible classification based on tangible signs or symptoms as to operative or non-operative hours. This condition must be placed in the column of first hour surgery.

Medicine Today

"Be not the first by whom the new are tried, nor yet the last to lay the old aside."

HARRY P. ROSS, M.D.
Richmond

Gowers' solution (sodium sulfate 12.5, acetic acid 33.3 and water 200.0) is superior to Hayem's solution for making erythrocyte counts.—Ying-Chang D'u and Forkner, C.E.: *J. Lab. and Clin. Med.* 23: 1282, 1938.

A count of 5,000,000 erythrocytes may be expected at the end of eight weeks, regardless of the initial count, if patients are given the equivalent of 1 or 2 units of liver extract daily or 40 grams of dessicated stomach daily for the first two weeks of treatment.—Isaacs, Raphael; Bethell, Frank H.; Riddle, Matthew C., and Friedman, Arnold: *J.A.M.A.* 111: 2291, 1938.

The etiology of **hemophilia** has been narrowed to a defect of a plasma constituent; vitamin K is ineffective in its treatment; blood transfusions remain the treatment of choice.—Minot, G. R., and Castle, W. B.: Editorial statement, Year Book of General Medicine, 1939. Year Book Publishers, Chicago.

A group of 505 young adults were tested with various dilutions of old tuberculin. Of 230 young adults tested with the 1:100,000 dilution, 96.7 per cent whose roentgenograms were negative gave a negative intracutaneous reaction, and 3.3 per cent gave a positive reaction. Of 43 young adults with roentgen and other evidence of active tuberculosis, 41 or 94.8 per cent gave a positive intracutaneous reaction and 2 or 5.2 per cent gave a negative reaction.—Hunt, L. W.: *Arch. Int. Med.* 64: 49, 1939.

At Purdue University, 2,300 intracutaneous tests were made with various dilutions of purified protein derivative. Those in charge plan to use only the weakest dilution in the future.

The Sodium Ferrocyanide test for glomerular function of the kidney has potential value in the clinical study of the relation of glomerular injury to hypertensive disease.—Stieglitz, E. J.: *Arch. Int. Med.* 64: 57, 1939.

In France, Robert Clement gives a combined mixture of typhoid vaccine, anti-diphtheritic toxoid (Ramon) and anti-tetanus toxoid (Ramon) at intervals of three weeks for three doses, to infants and nurslings as well as adults. He reports no unfavorable reactions and very satisfactory results over many years.—Clement, R.: *Presse Med.* 46: 1139, 1938.

Antacids have been classified as systemic (absorbable) and non-systemic (non-absorbable). Of all tested, the colloidal form of aluminum hydroxide (which is non-systemic) was found to be superior.—Adams, W. L.: *Arch. Int. Med.* 63: 1030, 1939.

Psychosomatic Medicine is the name of a new medical journal whose articles deal with the interrelation of the body and its internal environment plus the psychologic reactions and the external environment.—Cobb, S.: *Arch. Int. Med.* 64: 1328, 1939.

The heart rate, well known to be increased by emotional stimulation in normal and in neurotic persons, may show no change in psychotic patients. —Whitehorn, J. C.: Assoc. Research Nerv. and Ment. Dis. Proceed. 19: 256, 1939.

Vitamin C, in addition to local treatments, in a dose of 50 mg. daily by mouth, is valuable in treatment of Vincent's infection.—Williams, H. M.: *Texas State J. Med.* 34: 779, 1939.

Vitamin B_1 and nicotinic acid and vitamin C in combination have proved valuable in treatment of psychoses other than those associated with an avitaminosis syndrome.

Dilantin, one-half grain three times daily, with or without the addition of phenobarbital, 1½ grains, at bed time, has helped control patients with convulsive disorders such as epilepsy in many instances where other methods failed.

Amphetamine (Benzedrine) sulfate is useful in narcolepsy, paralysis agitans with rigid muscles, catatonic schizophrenia and the treatment of some alcoholics.

Potassium chloride in 25 per cent solution, 6 grams daily, relieves symptoms of some with Meniere's disease. It is also useful for attacks of flaccid quadriplegia seen in cases of familial periodic paralysis.

Prostigmin helps patients with true myasthenia gravis.

Thyroid medication, predicated upon its proven ability to favorably affect the nitrogen balance, has helped many cases of schizophrenia and manic-depressive psychosis.

"The shock treatment of psychoses goes on with somewhat diminished enthusiasm."

—Cobb, Stanley: Progress in Internal Medicine. *Arch. Int. Med.* 64: 1328, 1939.

Paredrine, a drug with action like epinephrine and ephedrine, which is stable and can be given orally, with more prolonged effect, has been used in the prevention and treatment of attacks of cardiac standstill seen in cases with heart block associated with syncopal attacks. The dose is 40 to 60 mg. three or four times daily.—Nathanson, M. H.: *Ann. Int. Med.* 12: 1855, 1939.

Papaverine, used as papaverine compound ("spasmalgin"), containing papaverine hydrochloride, 0.021 gm., pantopon 0.012 gm., and atrinal 0.001 gm., in 1.0 cc. relieves distressing abdominal cramps associated with frequent, purulent, bloody stools in acute phases of chronic ulcerative colitis and other dysenteries.—Bargen, J. A., and Jackman, R. J.: *Surg. Gyn. and Obs.* 68: 749, 1939. Papaverine extracts of opium were the best of ten vasodilator drugs studied for use in the treatment of congestive heart failure; they hastened the recovery.—Warembourg, H., Linquette, M., and Ravant, J.: *Presse Med.* 46: 1761, 1938.

Oxygen given by the Boothby, Lovelace and Bulbulian inhalation apparatus, in 100 per cent strength, at a rate of 6 to 8 liters per minute, at the very first prodromal symptoms of a migraine headache often aborted an attack in many patients. —Alvarez, W. C.: Proc. Staff Meet. Mayo Clinic. 14: 173, 1939.

Urethane in 1 to 2 gram doses (dissolved in water before administration) every four hours but not exceeding a total of 4 grams in any 24 hour period and not continued longer than 5 successive days, gave symptomatic relief to many patients with bronchial asthma when other methods failed.—Farmer, L.: *J. Lab. and Clin. Med.* 24: 453, 1939.

Heparin is useful in preventing postoperative embolism in selected cases, in treating pulmonary embolism, thrombophlebitis of the legs, and cases of coronary occlusion when thrombosis has occurred and cases of cerebro-vascular thrombosis, when carefully selected. Details of the technic for its administration may be found in the August 1938 issue of *Annals of Surgery* or in Year Book of General Medicine for 1939, page 568.

Sulfapyridine should be given in sufficiently large initial dosage in pneumonia because pneumococci differ in their susceptibility to the drug and may develop a tolerance to it. Reimann cautions that the drug may be harmful in atypical pneumonia and urges that it be used *only* after an etiologic diagnosis has been made.—Reimann, H. A.: *Arch. Int. Med.* 64: 362, 1939.

Specific capsular substance given as a single injection in a dose of 2 mg. will markedly increase the threshold of resistance against that specific strain of pneumococci in a few days, without untoward effect, and give an immunity lasting for several months. It may prove valuable as a public health measure in controlling certain epidemics and/or in the army, navy, and other such organizations.—Smillie, W. G.: *N. Y. State J. Med.* 38: 1485, 1938.

SICKLE CELL ANEMIA

A CASE REPORT

K. T. KNODE, M.D.

A. S. GIORDANO, M.D.

South Bend

The following case report of sickle cell anemia is of interest because it covers observation of a patient over a period of seven years and may serve to stimulate clinical interest so that physicians may consider it in the differential diagnosis of anemia in Negroes.

CASE REPORT

The patient is a colored female child who was first seen when one year of age, in 1933, at the Children's Dispensary because of repeated upper respiratory infections and unsatisfactory growth. Physical examination revealed a typical picture of rickets.

Blood count was as follows: RBC 2.2 million per cmm; WBC 20,000; hemoglobin 5.6 grams (37%). Differential showed marked anisocytosis, few sickle cells and many elliptical cells, polychromasia. Reticulocytes were 10.7%; polys 36%, small lymphs 64%. Wassermann, negative. Urine, negative.

A diagnosis of sickle cell anemia was made at this time and investigation of the entire family for sickling trait was negative.

Treatment consisted of balanced diet and the administration of iron citrate with a small amount of copper. Several months later the patient was again examined. The hemoglobin had increased to 50%, red blood count 3.5 million per cmm. Red cells showed considerable improvement since the previous examination. At this time, the patient complained of pain in the arms and legs.

Three months later, the hemoglobin was 65%; the red blood count was 3.6 million per cmm. Patient was gaining weight satisfactorily.

The patient was admitted to the St. Joseph Hospital, October 19, 1933, because of frequent upper

respiratory infections, and we were to determine whether or not this patient was receiving adequate diet at home. At this time the hemoglobin was 4.9 grams, 32%; red blood count 2.9 million per cmm.; white blood count 17,000. The blood smears showed many nucleated red blood cells, macrocytosis, poikilocytosis, and many sickle cells. The patient was given a blood transfusion, and high vitamin diet was prescribed together with iron citrate by mouth.

The patient was seven years of age when seen on February 4, 1939. Physical examination at this time revealed slight enlargement of the heart with a systolic murmur over the apex. The liver was enlarged, reaching the umbilicus, and the spleen was not palpable. Urine was negative except for a 1-plus albumen. Subsequent blood examinations: hemoglobin, 6.7 grams, 45%; red blood count, 2.07 million per cmm.; white blood count, 12,900; fragility test showed increased resistance to hypotonic salt; platelets, 674,000 per cmm.; reticulocytes, 15.8%; van den Bergh, direct, negative; quantitative, 2.7 mgm%.

Sickle cell anemia is a rare blood dyscrasia occurring chiefly, although not exclusively, in Negroes. The clinical and hematological features of this disease were first described by Herrick in 1910 and since then many contributions leading to the complete knowledge of this disease have been made.

The term *sicklemia* was proposed by Cooley and Lee who described the sickling phenomena and differentiated between the sickle trait and true sickle cell anemia. The sickle trait is applied to the phase of the syndrome that occurs in individuals whose past history does not suggest either latent or active sickle cell anemia and does not present any of the clinical features of the disease, except that the red blood cells have the characteristic appearance of sickling.

The sickle cell trait has been observed from birth to the age of seventy-eight. Symptoms of the sickle cell anemia have become manifest between the ages of one to ten years. The youngest patient reported was one of three and a half months of age and the oldest was thirty years of age. These observations are important in the study of the disease for they demonstrate a high morbidity and mortality among the younger patients and the absolute immunity of sickle cell anemia of individuals past the age of thirty-five. The disease is more common in the male, occurring in a ratio of three to one, while the sickle cell trait occurs equally between the two sexes. It is remarkable that the disease occurs most frequently among the American born Negroes. The literature reveals only one case reported from Africa. The disease and the trait have been observed in many localities throughout North America. The incidence of the sickle cell trait is 7.5 per cent and the anemia is estimated to occur from 0.2 to 1.5 per cent of those that show sickle cell trait.

Taliaferro and Huck have shown that the disease is hereditary and behaves as a single mendelian character which is dominant and not sex linked. At the present time, most investigators feel that not enough evidence is available to justify this conclusion, but all agree to the genetic constitution of those individuals with sicklemia. At the present time, there is no conclusive evidence of any single etiologic agent.

Clinically, it has been definitely established that sicklemia is asymptomatic, while sickle cell anemia has a characteristic clinical picture. These patients usually complain of asthenia, joint and muscle pain, associated with bouts of fever. Pain in the abdomen, particularly in the upper quadrant, is relatively frequent. The patients are pale and under weight. Lymph nodes may be slightly enlarged. The heart is slightly enlarged. The pulse is rapid and pretibial edema may exist. Round, punched-out ulcerations may appear just above the ankles. The liver is quite frequently enlarged and the spleen at times is palpable but seldom enlarged after the disease has existed for some time. The active phase of the disease may last for weeks or months and may be followed by remissions or by a latent phase of variable duration.

The blood picture is characteristic in which the erythrocytes show the striking sickling phenomena. Fresh cover slip preparations will show the characteristic morphology of the sickle cell. This sickling phenomena may be accentuated by subjecting the red blood cells to increased carbon dioxide atmosphere; the process may be reversed by the introduction of oxygen. In some cases, as many as fifty per cent of the erythrocytes may be deformed. The majority of these are elongated, sharply pointed at one end or at both ends, with the strict tendency to be crescentic or elliptical. Normoblasts are usually present and often in large numbers, but only a few of the sickle cells are nucleated. Diffuse and punctate basophilia is present. The number of reticulocytes is usually increased as well as the white blood cells which may vary from fifteen to thirty thousand per cmm. The platelets may be normal or increased. Phagocytosis of the erythrocytes by macrophages has been repeatedly observed both in vivo and vitro. The fragility of the cells to hypotonic salt solution is usually increased or normal and the sedimentation rate is usually increased. Bilirubinemia always exists, but a direct van den Bergh is negative. The clotting and bleeding times are normal. It has been shown that the sickling phenomena may be increased by heat and retarded by cold. Bile pigments and bile salts also accelerate sickling. It has also been shown that the blood serum of these patients does not produce sickling when mixed with normal cells, but that chemical agents capable of producing anoxemia, such as carbon dioxide, ethylene, nitrous oxide, etc., do produce sickling. This process is also reversible.

Post mortem observations are few. It has been shown that sickle cells may be recognized in tissues

fixed in formalin in practically all organs of the body. Hemosiderin increase has been found in lymph nodes, spleen, liver, and kidneys. Rich believes that the disease is characterized by a characteristic histologic picture. The leg ulcers do not show any characteristic histological lesions. The spleen has varied greatly in size. In one patient the spleen weighed as much as 621 grams, while in an older patient its weight was 2.4 grams. The liver shows fine periportal fibrosis and contains many deposits of hemosiderin. This process may extend and progress to definite cirrhosis. The bone marrow has been studied by many observers. The most significant finding has been the presence of hyperplastic foci of red marrow and a few areas of necrosis. The sickling morphology of the cells is also present in the marrow cells and the bones often appear porous in the radiographs. It would appear that primarily this disease affects the hemopoietic system and leads to the production of abnormally constituted erythrocytes.

The anemia appears to be of hemolytic origin, although the mechanism is not known since the fragility is normal or increased. It has been amply demonstrated that the sickle cells, transfused into normal individuals, can be found as long as twenty-one days after transfusion. The role of the reticulo-endothelial system in the disease is difficult to determine. Although phagocytosis of the erythrocytes has been observed in vivo, there is no evidence that there exists a perverted activity of the reticulum cells in the disease.

ABSTRACTS

NEW TREATMENT OF WAR WOUNDS

Just now anything authoritative on the treatment of war wounds and air-raid casualties, especially if based on actual experience of modern warfare, deserves the closest attention of the medical profession. One such recent contribution,[1] reviewed in the *British Medical Journal*, presents the results of a unique experience in the treatment of wounds at the base hospital in Barcelona during the Spanish War.

Practically all the wounds, which were the result of air attack, were infected, and many of the injuries were of the gravest type, involving severe lacerations and comminuted fractures. They were all treated in the same way—namely, by surgical excision of the wound followed by encasement in closed plaster—and the results described are far superior to those claimed for any other method.

Such a method, contrasting so sharply with all accepted surgical principles, requires the strongest possible credentials, and these are supplied, not only in a foreword to this volume by Professor Hey Groves from his own observations, but from the photographic records, which accompany the cases recorded. That these results are not merely a happy accident is shown by the fact that out of 1,073 cases of open fractures of the limb there were only six deaths. Since in a large number of these cases the average surgeon would have adopted immediate amputation the results can only be described as extraordinary.

The first procedures—namely, thorough cleansing of the wound with the excision of all contused tissues, removal of foreign bodies and loose bone fragments, and provision of adequate drainage—need no comment, but to encase the whole limb in a closed plaster cast after merely packing a little gauze into the cavity demands considerable courage. The plaster rapidly becomes soaked in blood and exudate, and as no provision is made for drainage or dressing, the stench becomes horrible, so that "it is impossibe to keep the patient for more than ten or fifteen days near others in a ward." It might be supposed that the patient would hardly survive such a time, but this is not the case, and when the plaster, having reached an entirely intolerable condition, is changed for another, the general condition of the patient is greatly improved and the wound is obviously healing.

That such results should have been obtained during the heat of a Spanish summer is astounding. On arrival at hospital, patients were first received by a team whose sole duty it was to undress them and store their clothing and portable valuables. Complete removal of clothing was essential, for although the external wounds produced by light bombs were very small and often painless, the internal damage was often so great that only immediate surgical operation could save life or limb. Since, fortunately, we in this country have not as yet had experience of the nature of the wounds which result from aerial bombardment—that is, from explosion, blast, fallen masonry, etc.— it may be timely to quote what this author has to say: "Wounds produced by aerial bombs and fallen masonry, unlike many bullet and shrapnel wounds, *must* be treated without delay. . . . The three factors essential to reducing the toll of aerial bombardment are rapid direct transport to the centre where immediate surgical treatment is possible, the application of plaster casts, and the early evacuation of treated cases to a base hospital."

Professor Prueta gives detailed description of the application of his method to wounds in every region—shoulder, forearm, femur, etc.—and so good is the case he has made out that the method deserves to be tried out fully. Should it prove as successful as in Spain it will solve many problems. If we could equal his figures and reduce the mortality from open fractures to 0.6 per cent, concludes the *British Medical Journal*, the whole treatment of war injuries will have been revolutionized. —*New York State Med. Jrnl.*—Vol. 39, No. 23 (Dec.1) 1939, p. 2224.

[1] Treatment of War Wounds and Fractures, with Special Reference to the Closed Method as Used in the War in Spain. By J. Prueta, M.D. (Pp. 143; 48 illus.; 8s. 6d. net.) London: Hamish Hamilton Medical Books, 1939.

EXPOSURE TO TUBERCULOSIS

Occupational exposure of the hospital personnel to tuberculosis does not increase the disease or death rates except among nurses who enter training in the tuberculin negative stage, Leopold Brahdy, M.D., New York, contends in *The Journal of the American Medical Association* for Jan. 13.

When a high incidence of tuberculosis is reported among hospital workers, he says, this is due to the use of exhaustive case finding methods, such as x-rays, which not only reveal cases having symptoms of the disease but also show the presence of tuberculous lesions of the lungs which appear, regress and heal without ever giving rise to symptoms or physical signs.

Dr. Brahdy's extensive study and comparison of statistics of the disease and death rates of various occupational groups, whose examination was similar and included x-ray examination, revealed an incidence among hospital personnel similar to that among other professional groups.

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E. L. Van Buskirk, M.D., Lafayette....Dec. 31, 1942

FEBRUARY, 1940

Editorials

THE SECRETARIES' CONFERENCE

The fifteenth annual Secretaries' Conference, held in Indianapolis, January twenty-first, was an outstanding success from the standpoint of program, attendance, manifestation of unusual interest and in point of attendance of out-of-state physicians. Some 175 registrations were noted, among them several of the A. M. A. official family including Morris Fishbein, editor of the *Journal of the A. M. A.*, past-president Abell, board of trustees chairman Booth, secretary Hayden, and trustee Henderson from Kentucky. Indiana A. M. A. officials were trustee Sensenich and legislative committeeman Crockett. Dr. Robert Parker, secretary of the Iowa State Medical Society, also came for the meeting.

Our visitors were deeply impressed with the various activities of our state association as displayed throughout the program. For almost five hours there was presented a somewhat sketchy picture of what is going on in Hoosier Medicine and the audience showed a keen interest in the ever changing scene.

Chairman Hane managed to complete the program on schedule time, though an occasional speaker exceeded his time limit, permitting a rest period and social hour prior to the evening dinner.

Association president Ruddell extended a very gracious welcome to the assembly, following which president-elect H. H. Turner, of the Oklahoma State Medical Association, discussed "Post-Graduate Medical Education in Oklahoma," which paper will appear in the March number of THE JOURNAL. Howard B. Mettel, Indianapolis, opened the discussion of this paper, following which many of those present offered comment on the topic.

Dr. Peter Irving, chairman of the Publications Committee, *New York State Journal of Medicine*, discussed "Hospital Insurance and Medical Indemnity." This paper also will be printed in THE JOURNAL for March.

An innovation in the programs of the secretaries' organization was presented by Rollen Waterson, of Lake County, and Paul Waddell, of St. Joseph County, their subjects having to do with their work as executive secretaries of these organizations. The medical secretaries of these two societies, Doctors Brandman and Thornton, added to this discussion.

President-elect Mitchell talked on "A Report on Hospital Insurance," while Doctors Beatty and Wright discussed some medical legislative problems.

Dr. Shanklin spoke briefly on "THE JOURNAL of the Indiana State Medical Association," following which council chairman Austin discussed "We," a presentation of some economic problems.

Executive committee chairman Nafe told how his committee functions, and association counsel, Albert Stump, referred to legal matters of general interest to physicians. A. M. A. *Journal* editor, Morris Fishbein, was then informally introduced and, in his inimitable manner, told how glad he was to get back to Indiana again.

The round-table discussion of secretarial problems, as has become the custom in recent years, did not progress so well, which leads to the observation that it might be well, another year, to "turn this program back to the Indians," meaning that we believe a secretaries' conference, for and by real flesh and blood secretaries, might be productive of much good.

Following the dinner Dr. Irvin Abell was introduced. He discussed a White House conference, held on January tenth of this year, in which President Roosevelt discussed his proposed hospital plan.

Dr. Sensenich introduced the guest speaker, Honorable James E. Murray, U. S. Senator from Montana, who is chairman of the Senate sub-committee which is considering the Wagner bill. Senator Murray spoke at some length, detailing the need of more adequate medical and hospital care in certain sections of the country. The audience was impressed with the fact that the speaker is a student of problems such as this and they marked the sincerity of his frequently repeated statement that worth-while medical legislation could not be had without the advice and confidence of the medical profession. The complete address of Senator Murray will appear in the next issue of THE JOURNAL. As a result of the many informal talks which occurred between visiting physicians, officers of our Association, and Senator Murray, he undoubtedly gained a better knowledge of the viewpoint of American medicine toward health legislation proposals than he had been given opportunity to learn previously.

So ended a most successful meeting, a program for which we are obligated to the Committee on Secretaries' Conference.

GIVE US MEN

"Bring me men to match my mountains,
Bring me men to match my plains,
Men with empires in their purpose,
And new eras in their brains."

A favorite consideration of Dr. A. J. Carlson of the University of Chicago are the beautiful piles of stone that make up our universities. He thinks of them "in labor" and contemplates that which they are bringing forth—men or rocks. No doubt it is more concrete for donors of endowments and for politicians to see fine buildings with their names on them than to endow or make possible comfortable professorships or fellowships for bright young men. But a university is only as great as the workers within its walls.

The 1939 Nobel prize for physiology and medicine was awarded to Dr. Gerhard Domagk of Germany. Unfortunately the Nazi government will not allow its acceptance. It has not kept him from receiving in 1937 the Emil Fisher Medal, highest honor bestowed by the German Chemical Society or, in 1939, the Cameron Prize of the University of Edinburgh, Scotland. The Nobel award was made for his work on the development of prontosil.

The work was not done under the protection of the present German regime but is typical of the old scientific Germany. Sulfanilamide was prepared in 1908. It and related dyes were developed by the chemical industry in an effort to find dyes of greater fastness to washing. In 1920 this industry prepared prontosil but there is no history of it again until 1932. This chemical industry had been for years interested in chemotherapy and experiments were carried out in the bacterial field with the new chemical compounds.

The important work on the clinical application of prontosil was made by Dr. Domagk. He was born in 1895 and studied at the University of Kiel. He spent four years in the German Army during the World War, at first as a grenadier; after being wounded in 1915, he was transferred to the medical corps. After the war he returned to Kiel and graduated in medicine in 1921. He spent many years as a lecturer in pathology and in 1927 joined the staff of the experimental pathological and bacteriological laboratory of the chemical industry of which he now is the director. The original work on the control of streptococcic infection in mice by prontosil was dated December 20, 1932. The original paper of this work, discussing its physical properties, its toxicity in animals, and its great therapeutic action for streptococcic infections was published February 15, 1935.

A great amount of work on prontosil and closely related preparations was done at once the world over. Very important clinical investigations were made by L. Colebrook of London on puerperal streptococcic infection. Much important laboratory work was done early in our own country. It will be noted that three years elapsed after the original work of Domagk until the clinical report was published. It is not uncommon to hear investigators of other countries remark that many Americans have the bad habit of rushing into print without sufficiently thorough investigation of a problem, and that we have even been known to take the ideas and early reports of work in progress (which have been told in good faith) from our European friends and hurry into print with them for the purpose of getting priority without giving credit where credit is due.

In the present state of world affairs, what can be expected from our European friends in science? Is it likely that time and money can be spared from mass killing for investigation for the saving of lives and the lessening of human misery? Even three years ago they were saying they had little to offer from the experimental standpoint. No money could be spared for research. In the British Isles laboratory investigation in experimental medicine has been practically at a standstill for years because of the impossibility of using animals for experimentation. The United States, not Germany, has been recognized as the place for progress in scientific study. From now on the torch of scientific progress in the medical arts must be in the hands of American schools and laboratories. This includes not only the branches of medicine but all the branches of pure science as well, for real medical progress comes only on the foundation of progress in physics, chemistry, zoology, botany, physiology and sociology.

If there are talent scouts for Hollywood and for major sports, why not for scientific investigation? The Rockefeller Institute is doing this in its field. Young men with straight thinking minds bring forth new anesthetics, cures for diabetes and pellagra, drugs to cure puerperal sepsis and pneumonia, help for dementia praecox and radiations for the arrest of the progress of cancer. Conditions should be so that the best minds can have the opportunity to work without the worry of economic problems. Men with degrees of medicine or philosophy should not be expected to live for years on five to ten hundred dollars a year which is less than is paid good stenographers in the same hospital. The fathers and mothers of these young men should not have to sacrifice all their lives to subsidize the young men whose efforts are for the benefit of all.

Many young men feel that there is a conspiracy on the part of the heads of departments in hospitals to get labor cheap by making it impossible for them to be admitted to the special boards and societies unless they have the long apprenticeships early. There is no argument about the need of the long apprenticeship, but the most deserving minds, regardless of parental ability to subsidize, should be spared from the necessity of going into unworthy occupations to earn a decent living or to pay back pressing obligations after years of preparation for the bare degree.

The laborer should be worthy of his hire and the welfare of the nation and the world needs the

brilliant potentialities of his mind which, in a possible Nobel prize winner, cannot be spoken of in terms of money.

THE INDUSTRIAL HYGIENE SURVEY

There recently came to the editorial desk a volume of some 160 pages entitled *Preliminary Industrial Hygiene Survey of Indiana Industries*, issued by the Indiana State Board of Health. As was pointed out in a recent editorial in The Journal, industrial medicine is one of our big problems of the present and future; health authorities are agreed that certain diseases are the direct result of employment and our legislatures already have taken cognizance of those findings. As was stated in that editorial, it now becomes our duty to make the proper studies of these problems and to offer solutions for them.

As is always the case in medicine, the first thing is to make the diagnosis; once this is properly made, the treatment may be applied. So it is in the making of the diagnosis that this survey report will be of invaluable assistance to physicians. Dr. Louis W. Spolyar, in charge of this division of the State Board of Health, together with engineer John S. Wiley, are chiefly responsible for this important volume.

The booklet shows that more than one and one-quarter millions of Hoosiers are gainfully employed, some half million of these in the manufacturing, mechanical and mineral industries. Some four thousand plants were included in the survey, for Indiana is the ninth largest industrial state in the Union (New York heads the list). Indiana is one of the seven states having the "blanket" type of coverage and has defined occupational diseases as those "arising out of and in the course of employment," no doubt taking this phrase from the State compensation law. So states the law, "A disease shall be deemed to arise out of the employment, only if there is apparent to the rational mind, upon consideration of all the circumstances, a direct causal connection between the conditions under which the work is performed, and the occupational disease and which can be seen to have followed as a natural incident of the work as a result of the exposure occasioned by the nature of the employment as the proximate cause, and which does not come from a hazard to which workmen would have become equally exposed outside of the employment. The disease must be incidental to the character of the employment and not independent of the employer and employees. The disease need not have been foreseen or expected, but after its contraction it must appear to have had its origin in a risk connected with the employment and to have flowed from that source as a rational consequence."

The Bureau of Industrial Hygiene was created in the State Board of Health a year ago and assigned definite duties and much has been accomplished during this first year. At the outset it was determined that certain existing organizations should be asked to participate in this work, among them the State Labor Department, the State Health Department and the U. S. Public Health Service. Unofficially, the State Medical Association, the State Nurses' Association, the State Tuberculosis Association, the trades labor unions and the Lake County Medical Society, the latter because of the large number of industries in that section of the state, were asked to participate.

The survey might be said to have started from scratch, since there were few statistics available. Occupational disease had not been reportable in Indiana, other than the comparatively few cases coming before the jurisdiction of the Industrial Board, which of course did not include all such cases. Statistics as to the medical welfare of Indiana employees show that only 4% have plant hospital facilities at their disposal, while 9% have contract hospitals to care for their needs; 12% do not even have a first aid kit for their injuries; 10% have the services of a full-time plant physician; 18.5% have part time medical attention; 35% have a full-time nurse. As to the sanitary provisions, one-third of the lavatories in our plants do not have the official approval of the State Board of Health; 15.9% use a common drinking cup, while 44.8% use the common towel. The survey shows that industrial exposures range from metals, through dusts and high humidity, to silicates, gases, petroleum products, etc. It is estimated that there are some 500 substances that may affect Indiana workers.

Much more might be said as to the various agents that are an integral part of our industrial picture, many of which must be filtered through the meshes of experience; the fact remains that we have before us a problem of monumental proportions; we have problems of the present, problems of the future. It is for the medical profession finally to determine just what diseases shall be classed as of industrial origin, hence compensatory, hence we again urge our State Association and our local county medical societies to begin an intensive study of all the factors involved.

NEW MARRIAGE LAW

"When Indiana's new marriage law becomes effective, March 1, brides and bridegrooms will find marriage more expensive. They must present certificates, when they apply for marriage licenses, showing that they have passed blood tests and are physically fit to wed.

"The Indiana State Medical Association has made no recommendation about the fee that physicians should charge for blood tests. It believes a satis-

factory arrangement will be worked out by leaving the charge to individual physicians. Some county medical societies are discussing the matter with a view to establishing uniform prices. There will also be a charge by the laboratory that makes the test. The state board of health laboratory makes no charge for indigents. Private laboratories are expected to agree on a charge of $1, or at least not more than $2 for each sample examined.

"It is not the law's intention to make marriage unduly expensive, but the additional fees must be paid. Physicians are expected to co-operate in establishing reasonable charges." — Indianapolis *News*, Jan. 8, 1940.

Rather often recently various newspapers in Indiana have made comment similar to the above editorial observed in the Indianapolis *News*. All of these comments have been very fair to our profession. The general public, of course, has the right to know what the attitude of the medical profession will be in this regard. We speak for the group when we offer the assurance that the medical profession will not take any advantage of the new law, for the profession had much to do with the enactment of the law and, professionally, will have much to do with its enforcement.

Very few county societies have regularly established fee bills though some years ago they were rather common. It is now the custom to adopt a standard fee for such services as attend the new marriage law, and we would urge those societies that have not discussed the present matter to do so at once. Properly enforced, this measure will be of lasting benefit to Indiana folk and we should render every possible assistance in seeing that it is fully carried out.

Following a study of the marriage law situation by a special commission appointed by Governor Townsend, some time ago, there was a decided reduction in the number of marriage licenses issued to non-residents of Indiana and the oft-repeated statement to the effect that one or both of the contracting parties had imbibed a bit too much seems to have disappeared. However, in one of the former Gretna Green areas of the state, according to recent newspaper reports, the mayor of the city caused the arrest and fine of a newly-made Benedict as he wabbled from the "parlor" of a local justice of the peace. Of course, the county clerk who issued the license a short time before most solemnly averred that he had noticed no evidence of intoxication, as did the justice. It will soon be seen what effect the new marriage law will have on similar situations.

100% MEMBERSHIP FOR 1940

1. Sullivan County—Dr. J. B. Maple, Secretary
2. Whitley County—Park Huffman, Secretary
3. Scott County—J. P. Wilson, Secretary
4. ? ? ?

Editorial Notes

Attention is directed to the fact that laboratories desiring to make pre-marital serological examinations must be approved by the State Board of Health. Again we remind you that this law is effective as of March first.

During the Council session, Dean Gatch, of the University medical school, gave birth to one of the smartest bits we have heard in years: "You never will find a substitute for a good general practitioner; this branch of medicine should be a specialty in itself."

E. Fullerton Cook, Ph.M., chairman of the Revision Committee, U. S. Pharmacopoeia, reports a standardization of sterile catgut, a matter that long has given the medical profession much concern. The report gives in detail the necessary steps to be taken in the preparation of this highly-important material, in order that it may meet the standardization requirements and a marked improvement in the quality and safety of this product seems now assured.

Dr. Verne Harvey, director of the Indiana State Board of Health, reports that the pneumonia serum law is working out very well and that due advantage is being taken of it by Indiana physicians. This law provides free serum for indigent patients. A matter in this connection has arisen in several parts of Indiana and has been due to occasional inability to procure the serum for private cases even though the serum for indigents is available. Under these circumstances, Dr. Harvey has suggested that the serum provided for indigents may be used and replaced as soon as possible.

While the modern automobile takes us places and gets us back home, there are times when it fails us and we have to resort to train travel. This was well demonstrated on a recent visit to Indianapolis when central and southern Indiana was in the grip of one of the worst snow, ice, and cold spells we have known in many years. As we walked into Union Station to take our train home, we found the place utterly filled with a milling crowd. Upstairs, the train platforms were crowded, as were the trains themselves. We asked a station official about it, who told us that the extraordinary crowd was due to unsuitable driving conditions and that he had not witnessed so much business in that station in many years.

The solidarity of action by the various committees of our State Association is noteworthy. Frequently we have mentioned the lengthy monthly sessions of the Executive Committee and of the

work of the Council. Notwithstanding icy, sometimes impassable roads, the mid-winter session of the Council, January 7th, was well attended and the usual large grist of business was transacted. The more than three thousand members of our Association can be assured that their affairs are well looked after. We have been sitting with this Council for many years and not once have we noticed any short cuts in the transaction of business; every matter receives the fullest consideration at the hands of this body.

The report covering the exhibit space at the Fort Wayne session shows receipts of $3,920, and expenditures of $2,846.57, leaving a balance of $1,073.43. However, this is not a net profit on the meeting as a whole, as a number of items, including the allowance of $500 to the host society for entertainment expense, are paid by the Association. In the future our meeting expenses will be decidedly increased since the House of Delegates has voted that the Association shall pay *all* the expenses of our meetings. But this almost four thousand dollars goes a long way toward meeting our expense account and for that reason we should show our appreciation by checking every exhibit in the line; ask questions about the various products, take the proffered samples—and use 'em—show these folks that we of Indiana are glad to have them with us!

Some time ago in an editorial, "The Rape of the Tonsil," we protested the wholesale removal of these little organs, arousing no little interest in the subject. Some of our Indiana newspapers made comment on the subject and we received several communications from our members, most of whom agreed with us. Hence it is with much satisfaction that we read an article in *The Journal of the A. M. A.* for January 6th, by Riemann and Havens, of Philadelphia, on the subject: "Focal Infection and Systemic Disease; A Critical Appraisal." One quotation from the well prepared article will suffice to show how these men feel about tonsillectomy as so generally done: "The removal of teeth and tonsils in an effort to influence the course of systemic diseases (those not restricted to any particular portion of the body) is unjustified in the majority of cases."

Surgeon General Parran of the U. S. Public Health Service is quoted in the lay press as stating that the war situation in Europe has "brought medical research to a dead stop," and that the United States must assume that duty from henceforth. He is quoted as saying, "It is not an accident that a democratic society provides the soil in which the free spirit of inquiry germinates and matures. . . . regimentation of men leaves no oportunity for freedom of thought. Without it, there is no scientific progress. The spirit of true scientific inquiry seems indissolubly associated with the free spirit of man." The above observation, which is a very true one, affords a cogent argument against the breaking down of our present medical system under which medical research has reached almost limitless heights.

Some time ago a group of physicians, now generally referred to as the Committee of 430, made some pronouncements regarding the future of the practice of medicine. This occasioned great discussion, much of which was based on the fact that less than half of this committee was actually engaged in the practice of medicine. Comparatively little has been heard of this organization recently. Now comes the announcement of the organization of the National Physicians Committee with a membership of some twenty thousand active physicians on its charter roll, and we are advised that this list is rapidly being extended. The prime purpose of this organization seems to be the preservation of the private practice of our profession, and its creation at a time when official Washington seems determined to do something to change the old order is indeed propitious.

Thirteen lives were sacrificed as a result of fireworks exploded in various sections of the country last July Fourth; in addition, 5,560 persons, adults and children, were injured by these devices of the devil. In many states in which anti-fireworks laws are in operation, there were but few such accidents. Indiana now has such a law, which became effective *after* the 1939 holiday, and it now remains to be seen just what will be done toward enforcement. This law not only prohibits the *sale* of fireworks, but also prohibits their *use* other than by professional exhibitors. In an article in The Journal of the American Medical Association for January 6th, the statement is made: "The danger of postponing the effective date of legislative enactments is demonstrated by reports from Indiana and Maryland." As a result, we had one death in 198 injuries in our state. Kansas City had the worst record for the year, reporting the casualty record as 60.83 per 100,000 population.

The ruling of the House of Delegates in regard to payment of actual expenses of committee members by the Association does not cover any committee meetings held during our annual session. This is the ruling of the Council. For many years, the traveling expenses of members of the Council in attending the annual mid-winter meetings have been allowed, but this recent ruling disallows any expenses for meetings held during our annual sessions. There are several hundred members assigned to committee work in our State Association and with all these in attendance at our annual

meeting, the treasury soon would be bankrupt if the expenses of all committee members were borne by the Association. It is only fair, however, that when a committee is called to Indianapolis or elsewhere, the actual expenses of the members should be paid. In the past, several of our members have spent thousands of dollars on Association business, all without remuneration, to say nothing of time lost from their offices.

George Dillinger, general chairman of the arrangements committee for the 1940 French Lick session, reports everything shipshape for the annual doings. Some of the convention features at this popular resort that brought forth complaints have been eliminated and from his preliminary report it would seem that all will be rosy. For example, the custom of holding the annual stag party in a basement room, poorly ventilated and affording no opportunity for milling about, as we are wont to do on such occasions, has been changed; this year we are assured that this party will be held in another spot. Then, too, the exhibits will not be crowded into the small space in the meeting hall ante-room; they will be located in the hotel lobby and in one of the enclosed porches. Also, due to conflicting dates with other meetings, our annual session will be a bit later than usual—October 29, 30, 31. Southern Indiana will be at its best at that time and it is not too early to make your plans and your hotel reservations right now. Your editor already has attended to that little matter.

Editor (not Elmer) C. P. Wolfe, of the New Harmony *Times*, made a prediction some forty years ago concerning the then new means of transportation—the automobile. We reprint herewith an item he wrote for his paper under date of December 29, 1899:

> An automobile factory will be established in Indianapolis for the manufacture of these vehicles. The president of the company makes the assertion that the automobile will never be used outside of cities and that it can never be sold for much less than its present price. But little credit should be placed in these predictions. The time will come when the expensive horse will be entirely done away with by a machine that will be both cheap and serviceable. The day is not far distant when the Posey County farmer will sow and harvest his crops with automobiles, will come to town to do his trading in one and will use the money now devoted to horse feed in purchasing that adjoining forty he has coveted so long.

We eagerly are watching the columns of this live country newspaper, hoping to see some predictions for 1980 by the same writer.

We've seen a goodly number of school buses of late and continue to be impressed with these vehicles. Not only do they offer means of transportation to the various consolidated schools of our state, but they have many other advantages. They offer opportunity for the youngsters to get better acquainted. The ride to and from the school buildings is a delight to most kiddies. Then, too, we have noted a marked improvement in bus drivers these past few years. They take an enormous pride in their job and see to it that their vehicles are spic and span—the State Board of Health does a good job of assisting in this part of the program, since the school bus system is wholly under the direction of the Board. The automotive public has come to recognize traffic rules as relates to the school bus and in a considerable amount of going about the state we never have seen a car trying to pass a school bus that is loading or unloading passengers. When we hark back to the trek of more than a mile along a dirt road to get to our first school house, we literally take off our hat every time we meet a school bus.

Press reports indicate that President Roosevelt is of the opinion that in many sections of the country hospitals are not immediately available and he proposes remedial measures to the extent of financing the construction of rather small institutions in these areas. It is unfortunate that more details were not given when the plan was first announced, since present information is rather vague. Several newspaper writers seem to be in opposition to the plan, as is evidenced by editorial comment in The Indianapolis *News*. Among the comments made in this article appears "The constant subsidizing of life in many of these communities is a social and economic mistake." Further along the editor says, "Federal ownership of community hospitals would mean that they would be built at an exorbitant cost and federal control would involve risk of political pressure on doctors and hospital management. The sick should be spared the blight of political treatment." While it is true that in some parts of the country hospital facilities are not readily available, it also is a fact that many sections are over-hospitalized; too many unused beds are listed in the annual reports. Another feature of the problem that should have our consideration is that of maintenance after the institution has been opened. In many of these communities the tax problem already is a grave one; too many of the local residents are of the non-tax-paying sort. Just how the necessary funds are to be raised to insure an efficient operation of many of these proposed hospitals becomes a real problem and the whole matter should be approached carefully with due study given to every phase of the problem.

President's Page

NATIONAL HEALTH LEGISLATION

The subject of national health legislation is one of particular interest at this time. There are many bills having to do with health problems before the present Congress. Essentially all of them have been carried over from previous sessions. Of the three more important ones—the Lodge bill, the Capper bill and the Wagner bill—only the latter is receiving much attention. It is still being studied by the sub-committee on Education and Public Health headed by Senator Murray of Montana.

Senator Murray, speaking at the Secretaries' Conference, advocated the passage of the Wagner bill, but admitted the possible need of some revision. He expressed himself as wanting the aid and guidance of organized medicine. He admitted that such legislation would fail if not given the whole-hearted support of the medical profession. On the whole, he left the impression of being friendly, open-minded and willing to co-operate. The program committee is to be commended upon selecting Senator Murray as the principal speaker.

While the Wagner health bill is still under active consideration, we have assurance from very reliable quarters that the probability of extensive health legislation being passed at this session of Congress is very slight. At least, the administration will not press any such legislation with the exception of a small hospital building program asked for by the President. This legislation as contemplated at this time would be based on the evidence of need and is safeguarded by such restrictions as to make it seem in no wise objectionable.

Although the probability of health legislation for the present seems remote, it is no time for the profession to relax its vigilance. The issue of state medicine or further socialization of medicine is not dead. Labor, farm groups and many other agencies are continually clamoring for an extensive National Health program, and we may rest assured that in the next political campaign, legislators of both parties will give serious consideration to these demands.

We are fortunate, however, in the fact that various plans of non-profit hospital insurance and the health program experiments being treated in California, Michigan, Massachusetts and New Jersey may be carefully studied. The proper evaluation of the results of these projects may be of great value. It also gives time for the more thorough education of the public by such organizations as the National Physicians' Committee.

Unquestionably medical hospital services to the low-income group constitute a serious problem. Whether any national program could be made to apply to all sections of the country would seem debatable. At any rate, the profession should present a solid front so that it might have a larger voice in any such legislation. The eight points enunciated by the trustees of the American Medical Association give us a very definite and excellent set of standards.

Karl R. Rudell

MEDICAL CARE GUARANTEED TO ALL LAKE COUNTY RESIDENTS



THE FOLLOWING ARTICLE WAS BROADCAST BY A REPRESENTATIVE OF THE LAKE COUNTY MEDICAL SOCIETY, JANUARY 2, 1940, OVER STATION WIND, GARY

Good morning, Ladies and Gentlemen:

Speaking for the 238 physicians of the Lake County Medical Society, I want to wish each of you the best of health and much happiness and prosperity during the New Year . . . and that brings us right to the things I want to talk about this morning.

Even if the year isn't a prosperous one for you, even if you do not enjoy good health, and everything else goes wrong, as somehow it always seems to, when you are ill; even if you haven't so much as the proverbial dime in the family purse, all of you can face the new year without worry about getting medical care when you need it. My purpose this morning is to deliver to you the guarantee of the Lake County Medical Society that there will always be medical care for all the people of Lake County; that there is medical care available to each of you, regardless of your ability to pay.

One of the fundamental principles of medical ethics is that the profession has for its prime object the service it can render humanity; reward or financial gain is a *subordinate* consideration. In choosing our profession, an individual assumes an obligation to conduct himself in accordance with its ideals, so you will find that no ethical physician ever turns his back on human suffering just because the patient can't *pay* for medical care.

As a tangible guarantee that there will be medical care for all the people, the Lake County Medical Society has recently organized what we call "The Medical Business Offices." They are conveniently located in Gary and in Hammond. The Gary office serves that city, and Hobart, Crown Point and Lowell. The Hammond office serves Hammond, Whiting, East Chicago, Griffith, and Munster. Our purpose in organizing these "Medical Business Offices" was to assist both the physician and his patient in their medical-economic relations, and to leave the physician free to exert all his effort in the prevention and cure of disease. Under the name "Medical Business Office," you will find written this line: *Medical Care for all the People.*

The plan of the physicians of Lake County for their business offices is very simple. If you need medical care for which you have not presented yourself to a physician because you are unable to pay him, just go to your family doctor and tell him of your condition — both physical and financial. You'll be surprised how easily everything that may have been worrying you can be worked out. The physician will probably send you to the Medical Business Office with a card of introduction and a statement of the value of the necessary services. Arrangements will be made at the Business Office for the *post*-payment of the cost of the operation or other services, and you will pay just as so many are paying today for automobiles and radios and furniture—on the installment plan. If the physician's fee is more than you can pay over a reasonable period of time without depriving yourself and your family of other necessities, then the doctor will be requested to reduce his fee to an amount you can reasonably be expected to pay, regardless of how little that may be.

A great deal of idealism has always actuated the best of physicians, and that idealism is translated into action in our Medical Business Offices, where members of a carefully selected and well-trained personnel have time the busy physician does not have for this work.

Many who come to the business offices are found to be indigent, and this economic group, who are "on relief," as we say, are a *community* responsibility. Here the county pays small fees for the physician's services, just as food and clothing and shelter and other necessities are provided for at public expense. I may say in passing that much that has been wrong with the administration and distribution of medical care for the indigent has been corrected during 1939 by the trustees in the various townships in Lake County. By permitting patients a free choice of physician, and by reason of what we call a "referral system," township trustees have cooperated with the members of the Lake County Medical Society in giving an improved quality of medical care, and the costs have been reduced to almost half. Any system of medical care that does not permit the patient the attention of his family physician is dangerous because it depreciates the quality of the services, adds much to the expense, and is likely to result in the abuses that characterized medical relief in Lake County prior to 1939, many of which are just coming to light. The county and the taxpayers would have saved over a million dollars in medical and hospital bills, and a better medical care would have been provided for the indigent, had the Medical Society's ideal of a "free choice of physician" been applied long ago and if the indigent sick had been permitted the attention of their family physicians.

Every family should have its family physician. Although everyone hopes and expects to contine to be healthy, illness oftentimes, and accidents always, arrive suddenly. When illness and accidents come, much time, anxiety and suffering, even life itself, may be saved if no time is lost searching for a physician. Moreover, recovery may be appreciably assisted through the confidence and specific understanding that develops through the close personal relationship with a physician of the patient's choice —the family physician. Health and sickness are among the most personal and important of human experiences; you should make arrangements while you are well and in advance of illness with a physician who will be your family physician. Then, when illness comes, or accidents occur, and if the patient finds himself without funds, the family physician is a valuable ally. The Medical Society's guarantee of medical care for all the people does *not* exclude those who do not have family physicians, but the physician is naturally happier about giving part or all of his services to families he knows and has served before and you will feel better about receiving a reduced fee or gratuitous services from your family physician. You should go to your family physician for a periodic health examination, as my colleague told you at this time last week. For both young and old it will help to discover, prevent, arrest and correct many of the devastating degenerative diseases of middle life, and certainly your children have the *right* to constant medical supervision. Every family should have its family physician.

I have said that, to the ethical physician, reward or financial gain is a *subordinate* consideration. Note, however, that it *is* a consideration. The medical profession could not survive if society could not agree that, measured by the services rendered, "the laborer is worthy of his hire." Good medical service cannot be expected unless society appreciated the value of such services sufficiently to attract and reward properly the type of men who can and will give good service Professionally and traditionally, the physician expects to render services to the poor without adequate compensation, but he must protect both you and himself from those who are able to pay, and don't. If he doesn't, it becomes necessary to charge a higher price for his services from those who do pay, which would be an injustice to the honest, paying patients. By preventing *abuse* of charity and by improving collections from those well able to pay, physicians are able to charge more uniformly for their services. Here, again, the physician finds himself with sufficient time, or proper facilities, so *medical* credit rating and collection services are made available to him by the business offices.

Physicians, as well as dentists, all of whom are concerned with the granting of credit to new patients, may, by consulting the business office, find that prospective patients already owe several physicians. The physician is then justified in withholding credit. Only the patient who finds it easier to change physicians than to pay his bill is affected. Patients who are really unable to pay the physician do not *need* to shop around and run up bills with several physicians, and patients who are worthy of credit are benefited by their listings with the business offices as good credit risks.

As for collection of accounts for physicians, the Medical Business Offices do not operate as regular commercial collection agencies. Accounts are collected by these offices for many physicians, not because the patients did not pay the physicians promptly, or because their medical credit was bad, but merely because these physicians find that the business side of their practice has taken too much of their time away from their patients, from postgraduate work and clinical study, and from research. These physicians have turned the majority of their accounts, both good and bad, to the Medical Business Offices. Other physicians have sufficient office help, and turn only delinquent accounts to the business offices for collection.

The advances in medical science during the last two or three decades have given most of mankind increasing years of life expectancy, freedom from pain, greater assurances of control of some of the most dreaded diseases, constant perfection of hospital facilities and an ever-mounting number of discoveries and improvements in methods of diagnosis and treatment.

Many of these discoveries have resulted from the tireless devotion, initiative and encouragement which have always characterized the system of independent medicine. This search for the truth about disease and the very existence of the health professions are evidence of the awareness of conditions inimical to health. There have been during the last thirty-five years some 4,000 surveys to determine the number and nature of health deficiencies, the extent and efficiency of public health activities, the costs of medical care and the methods of supplying services. These surveys, often depending upon *by whom* and *for what purpose* they were made, have brought about varying opinions as to how many people lack medical care, and the reasons for lacking it.

One of the surveys, which seems to be typical of the rest, was made by the Massachusetts Department of Public Health in a study of 15,000 persons with chronic diseases. The figures show that 71% had the services of physicians and the other 29% were without medical care for the following reasons: *Only 3%* did not have physicians because they said they were unable to pay; 2% had irregular physicians (cultists or quacks); 1% for other and unknown reasons; but *23%* did not have medical care because of their *lack of health education.* Some were afraid to go to their doctors, some had no faith in physicians, others felt that their condition was not serious. Thus we see that *only 3%* of 15,000 *sick* people stayed away from their physicians because they were unable to pay, and, in Massachusetts, as in Lake County, all they need to do is ask, and they shall receive. Thus it is

obvious that any lack of a complete distribution of medical care is due, not to financial or economic deficiencies, but to lack of general health education.

To summarize, may I again impress upon you four things to remember from this morning's broadcast:

1. The Lake County Medical Society GUARANTEES medical care to everyone, regardless of ability to pay.

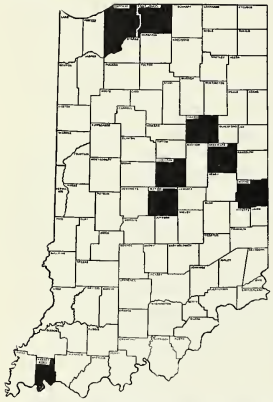
2. Every family should have its family doctor.

3. Those able to pay MUST pay for medical services, and

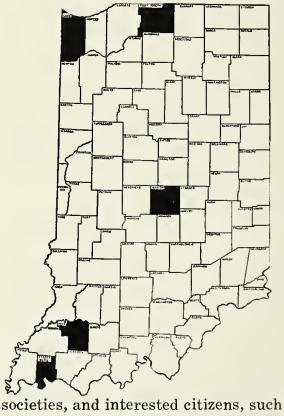
4. The only important thing needed to insure an adequate distribution of medical care to everyone is HEALTH EDUCATION for those who do not get medical care because of fear and ignorance. Medical care is available to all the people, but they must be educated to take advantage of it.

CHILD HEALTH CONFERENCES AND PRENATAL CLINICS IN INDIANA

The Bureau of Maternal and Child-Health of the Indiana State Board of Health in August, 1939, conducted a survey of the existing conferences being held in various counties of the State for the provision of adequate prenatal care. Likewise, a similar survey was made through the county health officers, nurses, and practicing physicians of counties in which child health conferences were being conducted.



Counties in Indiana Holding Child Health Conferences 1938-1939.



Map Showing Counties Which Conducted Prenatal Conferences 1938-1939.

Accordingly, Maps A and B showing the counties in which these conferences are being held, indicate that Indiana as compared to neighboring states such as Kentucky, Illinois, and Iowa, has not provided its citizens of the low income groups with the opportunities and advantages that this type of public health work has to offer. The survey indicated that these provisions are at all times available through the best sources, namely, the office of the private physician. However, it is to be admitted that there still exist two factors, namely, economics and ignorance, which prevent certain groups of citizens from seeking prenatal care and continued medical supervision of the infant and preschool child.

During the past six months it has been encouraging to note the number of inquiries received by the Bureau from the county medical societies for advice as to procedures and methods for setting up such conferences. These inquiries have in many instances been prompted and worked out through the cooperative efforts of the county medical societies and private lay organizations interested in the promotion of maternal and child health, such as the parent-teacher associations, and sororities.

It is believed that there is a place for such services in the public health program of Indiana, and that through the cooperative efforts of the Bureau of Maternal and Child-Health, the county medical societies, and interested citizens, such programs can be forwarded without interfering with the private practice of medicine and with no disturbance of the patient-doctor relationship. Any inquiries received by the Bureau of Maternal and Child-Health will be forwarded to the secretary of the county medical societies. It is hoped that each county medical society secretary will give due consideration to the plans of the interested health groups, and seriously consider the advisability, as well as the means, of promoting such conference by formation of a maternal and child health committee in his society.

The State Board of Health will be glad to supply, for any local groups, outlines and procedures for the establishment of these proposed conferences. It is to be remembered that this is a local problem and that final decisions as to the needs for such practices of preventive medicine rest entirely with the local county medical society.

INDIANA AND THE REFUGEE PHYSICIAN

Albert Stump, Attorney
Indiana State Medical Association

The political developments in Europe in the past few years have created a problem in this country, as in almost every country, with regard to the absorption of refugees who are members of the "professions." This article is intended to deal only with that problem in reference to the influx of refugee physicians into the State of Indiana.

In their own country these men have been regularly licensed and practicing physicians prior to their emigration. In this state the conditions are greatly changed from that of their original home; the English language is essential to the practice of medicine; and the standards of education and practice of physicians in this state undoubtedly vary from the standards and practice in their original country. The perplexities of the situation arise from the fact that the state, while it may welcome such persons as individuals, owes the duty to the citizenry of the state to insure their capabilities as physicians before it permits them to practice.

Unlike some other states, Indiana did not meet the situation by the creation of a requirement of citizenship either by statute or regulation of the State Board, as was done in the States shown below

By Statute:

Ark. Acts 1939, No. 342, Sec. I; Del. Laws 1937, c. 86, Sec. I (amending Sec. 925) (Olus one year's residence); Ga. Laws 1939, No. 238, Sec. I, p. 319; Idaho Laws 1939, c. 52, Sec. I; Neb. Comp. Stat. (1929) Sec. 71-202; N. H. Pub. Acts 1939, c. 139, Sec. I; N. J. Med. Rules (1939) Sec. I; Tex. Ann. Stat. (Vernon, Supp. 1939) art. 4501; Wyo. Rev. Stat. Ann. (Courtright, 1931) Sec. 86-104.

By ruling of the State Medical Board: Ala. Med. Rules (1938, as amended); Iowa Med. Rules (as amended, 1938) p. 36, Sec. 18; Letter, Ass't Secretary, Miss. State Board of Health, Oct. 4, 1939; Letter, Secretary, Mo. State Board of Health, Sept. 28, 1939. The same appears to be the case in Florida, Kansas, Kentucky, Michigan, Minnesota, Montana, Nevada, North Carolina, Oklahoma, South Carolina, Tennessee, Vermont, Virginia and West Virginia.

(From Harvard Law Review Vol. LIII, p. 113, note 5.)

In fact, there has been no legislation since this problem became apparent, which was aimed or intended to control or restrict the licensing of refugee physicians. The statutory requirements which a refugee physician must fulfill are the same as required of all persons seeking a license to practice medicine. This does not mean that the public was unprotected against practice by unqualified persons. (Burns Annotated Statutes, 1933 Sec. 63-1301.)

Under our statutes the license is issued by the clerk of the county in which the applicant desires to practice, but is issued only upon the presentation of a certificate from the Indiana State Board of Medical Registration and Examination. (Burns Annotated Statutes, 1933 Sec. 63-1302.)

The statutes, (Burns Annotated Statutes, 1933 Sec. 63-1306) creating the Indiana State Board of Medical Registration and Examination, charge that Board with the duty of prescribing the minimum requirements with regard to education which must be complied with by all applicants, and also with the duty of prescribing the minimum requirements and rules for the recognition of medical colleges. The State Board may not issue a certificate to any applicant until the applicant has satisfied the Board that he has graduated from a reputable medical college maintaining a standard of medical education approved by the Board, and unless the applicant has satisfactorily passed an examination as to his qualifications. (Burns Annotated Statutes, 1933 Sec. 63-1306; Pitzer vs. Indiana State Board, etc., 94 Ind. App. 631, 177 N.E. 865.)

The State Board, faced with the uncertainty as to the standards of medical education in foreign schools, and as to the educational and professional qualifications of such physicians from information furnished by them, set up certain rules and regulations concerning applications for license by physicians who qualified and practiced in foreign countries prior to their emigration to this state. An analysis of those rules and regulations which became effective January 11, 1938, discloses that the Board has not been unaware of its duty to protect the citizens of this state from the dangers concurrent with the licensing of unqualified practitioners.

Under the regulations adopted by the Board, all such physicians must take an examination to obtain a license. To qualify to take an examination such physicians must meet the following requirements:

1. Their premedical qualifications must conform to the premedical requirements of the Indiana Board.
2. They must submit a complete record of professional courses upon which their diploma was granted.
3. They must submit their diploma, which must be from a school recognized by the Indiana Board.
4. They must submit the foregoing, in original together with a translated copy of each, and these must be visaed by a United States consul in the country wherein the school from which they graduated is located. (Paragraph A, Rules Governing Examination and Licensure for Graduates of Foreign Schools. Indiana State Board of Medical Registration and Examination.)

Any refugee physician who, prior to January 11, 1938, upon examination obtained a license in some

other state with which Indiana reciprocates, is entitled to take the examination *upon compliance with the foregoing.* (Reciprocity. Instructions for Graduates of Medical Schools Located Outside the United States and its Possessions. Indiana State Board of Medical Registration and Examination.)

All such physicians who were not licensed prior to January 11, 1938, in a State with which Indiana reciprocates, must comply with the foregoing and in addition must submit evidence that the applicant has repeated the senior year in and graduated from a medical school located in the United States which is recognized by the State Board, to be entitled to take the examinations. (Paragraph B, Rules Governing Examinations.)

Under a further regulation of the Board, all examinations are conducted in the English language.

These requirements by the Board undoubtedly render it difficult for a refugee physician to obtain a license to practice in this state. The position of the Board is not subject to attack, as being unreasonable, since the Board cannot issue certificates unless it is satisfied that its requirements are met, and since the Board could not reasonably be satisfied that its requirements are met by the requirements of a foreign school of which it has no knowledge or any adequate means of investigation. Pitzer v. Indiana State Board, etc., supra.

As a result of the action by the Board, Indiana has not had an acute situation. This is demonstrated by the fact that although there have been about one hundred inquiries in the past two years, there has been only one certificate issued after compliance with the requirements, and only one instance at the present time of any such physicians undergoing the further schooling required before application can be made.

It is believed that the Board has acted properly and that the position which it has taken is impregnable in the light of the statutes and the decided cases in this state.

UNDER THE CAPITOL DOME

BOARD MEMBERS RE-ELECTED

All officers of the Indiana State Board of Medical Registration and Examination were re-elected at the board's annual meeting conducted in the Lincoln Hotel in Indianapolis on January 9. They will serve for one-year terms. The officers are: Dr. J. T. Oliphant of Farmersburg, president; Dr. N. E. Harold of Indianapolis, vice president; Dr. J. W. Bowers of Fort Wayne, secretary, and Dr. W. C. Moore of Muncie, treasurer.

Next meeting of the board will be held in Indianapolis in March, but a definite date was not set.

ACCIDENTAL INJURY AND INSURANCE COMPENSATION

An interesting decision involving the definition of an accidental injury as it relates to accident insurance policies has just been issued by the Indiana Appellate Court.

The court ruled that the slivering of a patient's jaw bone by a dentist during the extraction of a tooth was an accidental injury and that the injured patient was entitled to benefits from his accident insurance policy due to the fact that he was incapacitated for some time.

The insurance company claimed that no accidental injury was involved because the patient had gone willfully to the dentist and willfully submitted to the extraction of the tooth. After the injury, the patient went to a dental surgeon who extracted the slivers from his jaw.

"There is evidence in the record" the Appellate Court said in its opinion, "which would sustain a finding that the slivering of the jaw bone and the entrance of the slivers of bone into the jaw was an unusual, unexpected, and unforeseen occurrence in the instant case." The court said that "we are impelled to hold that the evidence in the instant case shows that appellee's injury was effected through accidental means."

The decision was made despite the fact that there was an exception to injury caused by medical or surgical treatment in the policy issued by the insurance company. This was because of the fact that at the trial in the Gibson county Circuit court, the insurance company had failed to raise that question, and had fought payment of the accident premium solely on grounds that no accident was involved and no new issues could be raised on appeal of the case.

MARIJUANA

Information concerning Indiana's methods seeking to eliminate use of marijuana and eradicate the weed has been asked by Dr. Pablo J. Osvaldo Wolff of Buenos Aires, Argentina. Dr. Wolff, who is expert on drug addiction for the League of Nations, wrote to Dr. Verne K. Harvey, secretary of the Indiana State Board of Health asking for the information, explaining that he had read an article about the campaign in THE JOURNAL of the Indiana State Medical Association. The item appeared recently in this column.

Dr. Harvey and Gene W. Ryan, inspector in charge of narcotics enforcement for the board, sent Dr. Wolff a copy of the Indiana law providing for the eradication and enforcement campaign and information concerning accomplishments under the law.

In 1932 Dr. Wolff was in the United States as a guest of the United States Public Health Service, the National Research Council, and the American Medical Association, and gave several lectures while here.

FEWER INDUSTRIAL ACCIDENTS IN 1939

Accidental injuries occurred to approximately 1,000 fewer Hoosier workmen during the last fiscal year than in the preceding twelve months, according to records of the Indiana Industrial Board.

Injuries causing more than one day's absence from employment were reported as 22,500 for the fiscal year, while the number for the year before was 23,510.

Not all, but a very large part of the group of injured workmen was sent to physicians and surgeons or oculists for treatment; many were hospitalized. Employers are required to provide medical treatment for a period of ninety days; the cost is borne by the employers or the employers' compensation insurance companies. Most Indiana industries carry workmen's compensation insurance in the approximate seventy companies authorized to write that kind of policy, but about 300 industries are self assurers and meet compensation costs from their own funds.

Industrial Board officials were unable to give figures to show the amount of fees received by physicians and surgeons or the charges of hospitals and clinics for treatment of industrial injuries; no record of these amounts is made to the board.

In addition to costs of their medical attention and hospitalization, Indiana workmen who were injured in industry received compensation totalling $1,962,-568.20 during the twelve-month period. This was a reduction from the amount of compensation paid during the preceding fiscal year when the total was $2,428,596.87. Frequently awards are made through agreements between the injured employee and the employer or insurance company, but in other cases amounts are awarded by the Industrial Board following hearings. Hearings were conducted by individual board members in practically all of the ninety-two counties, and a total of 1,861 such hearings were held. A second hearing, conducted by the full board, was held in 391 cases in which either employer or employee was dissatisfied with the decision of the single board member.

Burial benefits of $150 were paid in ninety-nine cases in which the employee was killed or died from industrial injuries.

Injuries to hands and fingers were the most prevalent; other leading types of injuries were eye and feet; hernia also was frequent.

The law requiring payment of compensation to injured workmen has been in effect since August 31, 1915. From that time until the close of the last fiscal year (June 30, 1939) a total of 797,759 accidents have been reported to the Industrial Board. Fatalities during the period were 5,055. There have been 41,566 compensation cases heard and employees have been paid compensation amounting to $52,287,089.79.

Members of the Industrial Board are Charles Fox, chairman; William Dennigan, Earl Heffner, Edgar Perkins, Sr., August Mueller. Edward L. Beggs is secretary.

Deaths



Dr. James T. Biggerstaff

James T. Biggerstaff, M.D., oldest practicing physician in Wabash county, died at his home in Wabash, December twenty-third. He was eighty-six years old. Dr. Biggerstaff located in Lagro in 1875. He was known as the "dean" of the Wabash County Medical Society, and was one of the founders of the Wabash Historical Society. Dr. Biggerstaff was twice married and had thirteen children, all of whom survive him. He served as county health officer from 1916 to 1918, and retired from active practice only a short time ago. He had been an honorary member of the Wabash County Medical Society and the Indiana State Medical Association since 1923.

* * *

Joseph H. Hauck, M.D., of Terre Haute, died January fourth, aged sixty-five years. Dr. Hauck had practiced in Terre Haute for the past forty years. He was a member of the Vigo County Medical Society, the Indiana State Medical Association, and the American Medical Association. He graduated from the Eclectic Medical College, Cincinnati, in 1899.

* * *

Willis B. Stewart, M.D., aged eighty-four years, died at his home in Indianapolis, January seventh. Dr. Stewart was a homeopathic physician, graduating from Hahnemann Medical College and Hospital, Chicago, in 1888.

Charles Franklin Martin, M.D., of Boonville, died December eighteenth, aged fifty-three years. He had practiced in Boonville since 1910. He graduated from the Louisville and Hospital Medical College, Louisville, Kentucky, in 1908, and was a member of the Warrick County Medical Society, the Indiana State Medical Association, and the American Medical Association.

* * *

Burrell F. Forbis, M.D., oldest physician in Harrison county, died December nineteenth, age ninety years. Dr. Forbis was a native and lifelong resident of Boone township and had retired from active practice about ten years ago. He graduated from the Kentucky School of Medicine, Louisville, in 1877.

* * *

Thomas B. Johnson, M.D., of Indianapolis, died January sixth, aged fifty-seven years. Dr. Johnson was born in Waveland and had practiced medicine in Indianapolis since the World War. He graduated from the University of Maryland School of Medicine and College of Physicians and Surgeons, Baltimore, in 1906, and served as a captain in the medical corps stationed at Fort Worth, Texas, during the World War. He was a member of the U. S. Army reserves at the time of his death, and also was a member of the Indianapolis Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

* * *

James H. Oakley, M.D., chief surgeon at the Marine Hospital in Evansville from 1913 to 1918, died December twenty-first, aged seventy years. Dr. Oakley graduated from Northwestern University Medical School, Chicago, in 1891 and immediately took a government post. During the World War he was stationed in Fort Worth, Texas.

* * *

Robert L. Hardwick, M.D., of Mount Vernon, died January fifth, aged seventy-six years. Dr. Hardwick had practiced in Mount Vernon for forty-three years. For thirty-six years he was health commissioner of Posey county. He graduated from the Missouri Medical College, St. Louis, in 1886.

* * *

J. C. Vaughan, M.D., former Marion physician, died January thirteenth, in New York. Dr. Vaughan was a world traveler, philosopher and explorer. He was a member of the Indiana State Medical Association from 1932 to 1937, and was a member of the American Medical Association. He graduated from Columbia University College of Physicians and Surgeons, New York, in 1907. Dr. Vaughan had visited in Marion a few weeks before his death.

News Notes

Dr. Frank E. Wiedemann, of Terre Haute, talked on "The March of Medicine" before the Terre Haute Literary Club, December eleventh.

* * *

Dr. H. J. Norton, of Columbus, and Mrs. Anita Springer of Greencastle were married at Orleans, November twenty-ninth.

* * *

The Indianapolis Medical Society at its meeting, December nineteenth, rejected a proposal to employ an executive secretary.

* * *

Miss Lucille Fenton, of Springfield, Ohio, and Dr. Frederick A. Schminke of Anderson were married in Springfield, December twenty-ninth.

* * *

Miss Anna Lucille Williams, of Monticello, and Dr. E. G. Ricker of Monticello were married Saturday, December thirtieth, in Indianapolis.

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Dr. John C. Warren has become associated in general practice with Drs. M. S. Fox and R. H. Fox, in Bicknell, where they have formed a group clinic.

* * *

Miss Elizabeth Davol, of Fall River, Massachusetts, and Dr. Abram S. Woodard, Jr., of Indianapolis, were married at the bride's home, December twenty-fourth.

* * *

Dr. Verna A. Christophel, daughter of Dr. and Mrs. W. B. Christophel of Mishawaka, and Mr. J. Archie Riggs of Mishawaka were married December fifteenth.

* * *

Fire caused considerable damage to the offices and equipment of Dr. Paul D. Moore in Muncie, December seventeenth.

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Dr. F. E. Keeling, of Portland, has been made president of the new Jay County Hospital staff; Dr. John Lansford of Redkey is vice-president, and Dr. B. M. Taylor of Portland is secretary.

* * *

Dr. C. B. Wilder, of Anderson, was guest speaker for members of the Anderson Business and Professional Women's club, January fourth, when a program devoted to a discussion of "Socialized Medicine" was presented.

Dr. Charles L. Aker who has practiced general medicine and surgery at Mooresville for the past fifteen years has opened new offices in Greencastle where he will continue his practice.

* * *

Colonel John J. Boaz, commanding officer of the 113th medical regiment of the Indiana National Guard, has been retired from active service, having attained the retirement age. Lieutenant-colonel Frank T. Hallam has been assigned to fill the vacancy created by Dr. Boaz' retirement.

* * *

Dr. Morris Fishbein, editor of the Journal of the American Medical Association, addressed the annual dinner meeting of the Catholic Charities Bureau in Indianapolis, January sixteenth. Dr. Fishbein's subject was "Socialization of Medicine."

* * *

The marriage of Miss Florence Alice Province, daughter of Dr. and Mrs. O. A. Province of Franklin, to Wallace Knapp Dyer of Evansville, took place December 23, 1939, in Franklin. Mr. Dyer is a senior in the school of medicine at Indiana University.

* * *

Dr. J. V. Pace who has been superintendent of the Rockville Tuberculosis Sanatorium since 1931 has been appointed head of the new southern Indiana tuberculosis hospital, Silver Crest, at New Albany. Dr. Pace will assume his new duties about February first.

* * *

Indianapolis City Hospital is one of thirteen institutions in eleven states to receive a loan of radium from the Federal government. The government has loaned to the hospital a supply of radium valued at about $7,500 for the permanent use of the hospital with the provision that no charge will be made for its use.

* * *

The Gill Memorial Eye, Ear, Nose and Throat Hospital, Roanoke, Virginia, presents its fourteenth annual spring graduate course, embracing the subjects of ophthalmology, otology, rhinology, laryngology, facio-maxillary surgery, bronchoscopy and esophagoscopy, April 1 to 6, 1940. For the entire course, the fee will be fifty dollars and the classes will be limited to fifty members. Complete information may be obtained by addressing the superintendent of the hospital.

* * *

The Indiana Association of the History of Medicine held a meeting at the Indiana University medical school, January seventeenth. Miss Cordelia Hoeflin spoke on the history of nursing and displayed dolls dressed in different nursing costumes. Dr. Thurman B. Rice spoke on "The History of Bacteriology." A quintet of sophomore medical students sang. The next meeting of the society will be held March 20 in Shelbyville when members of the society will be guests of Dr. W. D. Inlow.

* * *

Miss Marjorie Cole of Columbus and Dr. Paul L. Rieth of Goshen were married, November eighteenth, in Columbus.

* * *

Miss Mary Thompson of Indianapolis and Dr. Kenneth I. Sheek of Greenwood were married, December second, in Indianapolis.

* * *

Miss Helen Catherine Wright of Indianapolis and Mr. Eugene Austin of Anderson and Indianapolis were married November twenty-ninth. Mr. Austin is a senior student in the Indiana University School of Medicine.

* * *

Miss Barbara Louise Bagley of St. Louis and Dr. W. L. Cole, Jr., of Evansville, were married in St. Louis, November twenty-third.

* * *

Miss Margaret I. Walsh of Fort Wayne and Dr. Joseph H. Baltes of Fort Wayne were married November twenty-third.

* * *

Officers for the state organization of the Indiana Society for Crippled Children were elected at a recent meeting as follows: Robert B. Acker, M.D., South Bend, president; John B. Funk, M.D., Jeffersonville, vice-president; Miss Marian Moore, South Bend, secretary-treasurer. All were re-elected. In addition, nineteen directors were elected.

* * *

Members of the executive committee for Deaconess hospital, Evansville, have been announced by Dr. William R. Davidson, president of the staff. They are Dr. Charles P. Schneider, Dr. I. C. Barclay, Dr. William E. Barnes, Dr. C. C. Herzer, and Dr. Charles F. Leich. Dr. Herzer was made chairman of the committee.

* * *

The fifth assembly of the United States chapter of the International College of Surgeons will meet in Venice, Florida, February 11 to 14, 1940. Dr. Vincent A. Lapenta, Indianapolis, is chairman of the editorial board for the organization's journal. Dr. Karl R. Ruddell of Indianapolis is a member of the board. For program or further information, address Dr. Fred H. Albee, General Chairman, Medical Center, Venice, Florida.

* * *

The first state conference on orthopedic nursing to be held in Indiana began January 29 and 30 and will continue its second session February 8 and 9.

Sessions will be held in the new auditorium of the State Board of Health building at the Indiana University medical center. Approximately 550 nurses are expected to attend the two sections. The conferences will be in charge of Dr. Oliver W. Greer, director of services for crippled children in the State Welfare Department, and Miss Eva F. MacDougall, chief of the Bureau of Public Health Nursing of the State Board of Health.

* * *

Dr. Charles N. Combs of Terre Haute was the surprised honor guest at an anniversary dinner given by the board of directors and staff of physicians of Union Hospital in Terre Haute, Friday, January nineteenth, in "grateful acknowledgment of thirty years of faithful service." Following the dinner, a program of speakers who paid tribute to Dr. Combs included Mr. William B. Hice (for the hospital board), Dr. Albert M. Mitchell, Mr. John Fitzgerald, Dr. O. O. Alexander, Dr. John White, Mr. Thomas A. Hendricks, executive secretary of the Indiana State Medical Association, Miss Nellie Brown, vice-president of the Indiana State Hospital Association, and Mrs. H. R. Vandivier.

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NATIONAL CONFERENCE ON MEDICAL SERVICE

The 1940 program of the National Conference on Medical Service (formerly Northwest Regional Conference) will afford an opportunity for doctors of medicine throughout the United States to exchange ideas and obtain sound practical information on medical economics for the good of the profession and the public.

The fourteenth annual meeting will be held at the Palmer House in Chicago, Sunday, February eleventh. A round-table on "Group Medical Care and Group Hospitalization Programs" will be presented. Invited to participate are R. L. Sensenich, M.D., South Bend; Carl F. Vohs, M.D., St. Louis; Henry R. Carstens, M.D., Detroit; George H. Kress, M.D., San Francisco, and D. H. McA. Pyle of New York City.

"Allocation of Federal Funds to States" will be presented by R. G. Leland, M.D., of the A.M.A. Bureau of Medical Economics. The discussion leader will be William F. Braasch, M.D., of Rochester, Minn.

Morris Fishbein, M.D., and Edward J. McCormick, M.D., of Toledo, will discuss "Effective Public Relations."

A round-table on "Medical Welfare Programs" will be conducted.

Mr. Paul G. Hoffman, president of the Studebaker Corporation, has been invited to be guest speaker at the noonday dinner meeting.

All members of the American Medical Association are cordially invited to attend the conference. There are no registration fees or dues.

L. Fernald Foster, M.D., of Bay City, Michigan, is president, and F. L. Loveland, M.D., Topeka, Kansas, is secretary of the conference.

AMERICAN SOCIAL HYGIENE ASSOCIATION MEETING FEBRUARY 5 IN INDIANAPOLIS

"Syphilis and Employment" will be the subject of an address by Dr. Walter Clarke, executive director of the American Social Hygiene Association, on February fifth, in Hurty Hall, the new auditorium of the State Board of Health building in Indianapolis. This building is the newest in the Indiana Medical Center group.

A dinner meeting, under the auspices of the Indiana Social Hygiene Association and the Indiana State Board of Health, will officially open the new auditorium on Social Hygiene Day. This meeting will be open to the public and physicians are invited to attend. Reservations may be made before February first at the Indiana State Board of Health.

The principal reason for observing this annual public health event is to encourage the use of proper medical facilities and to increase the number of infected persons receiving treatment. Social Hygiene Day is observed in every state in more than 5,000 communities and is sponsored by the American Social Hygiene Association in cooperation with hundreds of health, welfare and civic organizations. This year in Indiana emphasis is being placed on the problems of venereal disease control associated with all forms of employment—household aids, laborers on public works, and employees in industrial organizations.

* * *

NATIONAL SOCIAL HYGIENE DAY—FEBRUARY FIRST

National Social Hygiene Day, one of America's leading annual public health events, will be observed for the fourth time on February 1, 1940. Plans for the annual event presage more than 5,000 community and regional meetings over the country and include, among other features, the release by the American Social Hygiene Association's National Anti-Syphilis Committee of a new sound motion picture on syphilis entitled "With These Weapons."

Reviewing gains against syphilis in recent years, Dr. Clarke, executive director of the Association, pointed out that the number of cases of syphilis under treatment in the United States had greatly increased and that more private physicians and more public clinics were treating the disease than ever before. This does not mean that there is more syphilis, but merely indicates that there are more cases under care, with fewer of them being neglected.

Blood tests have reached a new high during the past year, numbering almost 11,000,000, a strong sign that physicians are making increased use of modern procedures for diagnosis. Additional progress was seen in the fact that 19 states now require examinations for syphilis in applicants for marriage licenses while 17 states ask similar tests for expectant mothers..

National Social Hygiene Day affords a yearly occasion when the public and the professions may

gather together for a stock-taking in the various states and communities, to review progress against syphilis and to map anew the strategy for another year.

The year ahead, it is expected, will see, as a result of action now being taken, a marked decline in the number of medical quacks, so-called "men's specialists" and certain druggists who, in violation of their own ethics and of the law, diagnose and treat syphilis and gonorrhea. These exploiters, it was said, have mulcted victims of syphilis and gonorrhea for too long a time.

"Their activities have increased apace with the extension of public interest in these diseases, and their flagrant operations have shocked communities in many areas. Fourth Social Hygiene Day will focus attention on this important obstacle to complete syphilis control, although other aspects of the problem will not be neglected," said Dr. Clarke.

INDIANA UNIVERSITY NEWS

Dr. Arthur P. Echternacht has been named roentgenologist at the Indiana University Medical Center. Dr. Echternacht, a graduate of Butler University in 1931 and Washington University of St. Louis, Mo., in 1935, has been a radiologist at the medical center the past year.

Born in Whitecreek, Wis., he received his grade school education in Mason City, Iowa, and his high school education in Janesville, Wis. He served his internship at St. Louis City Hospital in 1935-36 and received special training in radiology for three years with Dr. L. R. Sante in the hospital.

The appointment, Dr. Gatch said, further strengthens the medical school's facilities for teaching in the field of x-ray.

Dr. Harold M. Trusler, assistant professor of surgery at the Indiana University medical center, has been named visiting physician for the newly-established department of constructive surgery at the Indianapolis City Hospital. The department with which Dr. Trusler will be associated was established to care for cases in which skin grafting and similar treatments are required.

Dr. Trusler is chairman of the division of plastic surgery at the medical center and research by his associates and himself has attracted wide attention, so much so that a detailed account of the method of treatment is carried in a recent issue of *Time* magazine.

Indiana University Medical Center, with its medical school, its school of dentistry, its school of nursing, its three hospitals and a wide variety of clinics, enjoyed one of the most progressive years in 1939 in its 31-year history, Dean W. D. Gatch announced. The end of the fiscal year in July showed that a total of 22,258 patients had been treated during the year in the hospitals and in out-patient service. Of this total 9,790 were treated as in-patients and 12,468 were out-patients.

In addition to this service, reaching every section of the state, 49,871 visits were made to the various clinics.

J. B. H. Martin, administrator, reported that admissions of in-patients were as follows:

Robert H. Long Hospital	2,570	
William H. Coleman Hospital	3,357	
James Whitcomb Riley Hospital for Children	3,863	
Total		9,790

Clinic visits were divided as follows:

Riley Hospital	21,459
Long Hospital	18,244
Coleman Hospital	10,168
Total	49,871

Establishment of a child health clinic early in December and completion of plans for a child study and guidance clinic scheduled to start early in January were among outstanding additions to the services. Another important addition was a tumor and cancer clinic in the Clinical Building. The clinic, also serving all parts of the state, administered 2,386 x-ray therapy treatments, 112 surgical treatments, 90 radium treatments and received 906 visitors.

Affording cancer sufferers the most modern approved methods for diagnosis and treatment, the clinic, it was pointed out, also provides an additional means of teaching medical students in all aspects of neoplastic diseases.

The child health clinic, located for the time being in the Coleman Hospital, is a service for the Juvenile Court, the Marion County Department of Public Welfare, and the Indianapolis Orphans' Home. Staffed with six pediatricians, including Dr. L. T. Meiks, chief pediatrician of Riley Hospital, it makes it possible for all wards of the agencies to undergo complete physical examinations and treatment of diseases or disorders that may be discovered.

The child guidance clinic is a new service for Riley Hospital and for children and parents throughout the state. Under the direction of Dr. David A. Boyd, psychiatrist added to the teaching staff during the year, the clinic will study personality maladjustments and assist children and parents in locating the source of emotional disturbances with the view of correcting them and thereby aiding the treatment of physical diseases or impairments.

The annual spring postgraduate course was described by physicians as one of the most successful in the history of the school. More than 400 physicians from all parts of Indiana attended the various clinics and lectures held over a week's period. Another postgraduate course in otolaryngology held the two weeks following the general course was attended by specialists from 22 states.

1940 CENSUS WILL BRING VALUABLE VITAL STATISTICS

While the inventors of diabolic instruments of war have been ingeniously practicing their craft, the scientific forces engaged in preservation of life have made even greater progress. Records of the U. S. Bureau of the Census indicate that depletion of population by deaths on the battlefields is of relatively small account when balanced against the results of the less publicized but equally dramatic contributions to the prolonging of human lives now being made by medical science.

It is possible, through Census records, to make interesting comparisons, for example, of death rates prevailing around 1900 and those of today. If the 1900 figures still governed, over 450,000 more deaths would occur this year in the United States than actually will take place.

In 1900, for instance, tuberculosis caused 201.9 deaths per 100,000 population. Now it causes but 53.6. Using the 1900 ratio against a present estimated U. S. population of 132,000,000, 188,500 Americans who otherwise would die are NOT dying this year from this cause alone—a cause which in the aggregate has cost more lives than the toll exacted in all the wars of history. This year, the *prevention* of deaths from tuberculosis will save more than four times as many people as the number of American soldiers killed on all the World War battlefields.

Forty years ago, influenza and pneumonia were killing about 200 people per 100,000. Now the rate is approximately 110, a saving for today at an annual rate of 117,000 lives. The diphtheria rate has been reduced from 43.3 to 2, a gain of 49,400 lives. Typhoid saving is 44,200.

The Division of Vital Statistics in the Census Bureau keeps accurate records on the 15 maladies against which medical science has made its greatest advances. These are tuberculosis, typhoid, smallpox, measles, scarlet fever, diphtheria, influenza and pneumonia, erysipelas, malaria, bronchitis, diarrhea and enteritis, cirrhosis of the liver, maternity deaths, congenital malformations and diseases of infancy, and nephritis. For these fifteen, the net reducton of deaths per year per 100,000 people has been 542, which would indicate a saving of 704,600 lives this year as against the 1900 mortality rate.

Eight causes have increased in deadliness: cancer, cerebral hemorrhage, heart diseases, diabetes mellitus, appendicitis, suicide, homicide, automobile accidents. The new death rate for these is 195 per 100,000 more than in 1900, therefore their current "contribution" over the number of deaths at the 1900 rate would be 253,500. Deduct this figure, therefore, from the savings by medical science, and the net gain this year is 451,100—equivalent to the 1930 populaton of Arizona, or New Mexico, or Idaho, or New Hampshire, and exceeding by wide margins the total populations of Delaware, District of Columbia, Nevada, Vermont, or Wyoming.

Students of vital statistics, medical men in general, sociologists, and the layman can find much to ponder over in these figures. Also to be considered are eight growing causes of death. Why are they growing? What can we do as individuals or professional men and women to combat them?

What are other general trends in American health, life, income, resources? Soon even more up-to-date statistics covering virtually every angle of economic and sociological interest in the United States will be available. The Sixteenth Decennial Census, to be taken in 1940, will inquire in detail into population, occupations, employment, housing, agriculture, drainage and irrigation, and into business and manufactures, and mines and quarries.

The economic censuses—business, manufactures, and mines and quarries—began early in January. The "domestic" enumerations are scheduled for April. Thorough and comprehensive, each census will be on a national basis and, in most cases, will be conducted as a person-to-person affair, with householders and businessmen interviewed by official enumerators direct.

The information collected in all these censuses will give a composite picture of the many affairs of the American nation and its people—a picture of tremendous value in charting the future course of the nation, the states, cities, counties, towns, and villages. Health authorities will keep a careful eye on the figures from these enumerations—when population figures go up and average employment and income fall in a certain section, health of the entire community may be endangered. When deaths from specific causes take a jump, an investigation is indicated to find out "Why?"

Thus, for these and other reasons too numerous to mention, it is essential that every citizen lend his full cooperation toward making each census a complete one. At least one phase of the 1940 enumerations—the Census of Population—will touch every person in America directly, and many people will be queried on two or even more of the various schedules.

Answers to Census questions are required by law, but the same statute requires the Census Bureau to maintain its long-established policy not to disclose any facts about individual persons or establishments. Individual reports are not available to any other government department. Assurance thus is given that reports to the Bureau will not be used for taxation, regulation, or investigation.

SOCIETIES AND INSTITUTIONS

INDIANA STATE MEDICAL ASSOCIATION THE COUNCIL

The Conucil of the Indiana State Medical Association convened for its midwinter meeting at 10:45 a.m., Sunday, January 7, 1940, in private dining room No. 1 of the Columbia Club, Indianapolis, with Dr. M. A. Austin, of Anderson, chairman, presiding. Roll call showed the following present:

Members of the Council:
First District—I. C. Barclay, Evansville
Second District—H. C. Wadsworth, Washington
Third District—W. H. Garner, New Albany
Fourth District—M. C. McKain, Columbus
Fifth District—not represented
Sixth District—Samuel Kennedy, Shelbyville
Seventh District—C. J. Clark, Indianapolis
Eighth District—M. A. Austin, Anderson
Ninth District—Not represented*
Tenth District—James M. White, Gary
Eleventh District—Not represented*
Twelfth District—A. J. Sparks, Fort Wayne
Thirteenth District—Alfred Ellison, South Bend

(* Dr. F. T. Romberger, Lafayette, councilor of the Ninth District, and Dr. Ira Perry of North Manchester, councilor of the Eleventh District, telephoned that they were unable to get to Indianapolis on account of a snow storm.)

Officers:
A. M. Mitchell, Terre Haute, president-elect
E. M. Shanklin, Hammond, editor of THE JOURNAL
T. A. Hendricks, executive secretary

On motion of Dr. Clark, seconded by Dr. Sparks, the reading of the minutes of the October, 1939, meetings of the Council, held in Fort Wayne, was dispensed with as these minutes were approved as printed in the November JOURNAL.

REPORTS OF COUNCILORS BY DISTRICTS

The short, informal reports of the councilors showed that medical organization is in good condition in each district. District meetings were reported scheduled as follows for 1940:

First District—Evansville, May 23, 1940
Second District—Sullivan, June 6, 1940
Third District—New Albany, May —, 1940
Fourth District—Seymour, May —, 1940
Fifth District—Terre Haute, May 10, 1940
Sixth District—Brookville, May 15, 1940
Seventh District—Franklin, 1940
Eighth District—Not set
Ninth District—Attica, May 16, 1940
Tenth District—Hammond, May 23, 1940
Eleventh District—Huntington, May 15, 1940
Twelfth District—Fort Wayne, May —, 1940.
Thirteenth District—Warsaw, 1940

Attention was called to the dates of the American Medical Association meeting in New York, June 10 to 14, 1940, and to the Indiana University state postgraduate meeting, May 6 to 11, 1940, and to the fact that district meetings should not conflict with each other or with the national meeting and the state graduate education course.

REPORTS OF OFFICERS

The following letter was received from Dr. Karl R. Ruddell, president:

"Miami Beach, January 5.

"I'm sorry I can't be there for Sunday but just can't make it. Too bad you fellows can't be down here where you could really enjoy it. Am just about able to get around now with a cane. Hope to send my crutches back. Leaving here soon for the west coast. Give my regards to the outfit.

Yours trury,

Rud."

In the absence of Dr. A. F. Weyerbacher, treasurer, the executive secretary summarized the following annual financial report which was compiled by George S. Olive and Company, certified public accountants:

TREASURER'S REPORT

January 5, 1940

The Council,
Indiana State Medical Association,
Indianapolis, Ind.

Gentlemen:

We have examined the cash records of your association for the year ended December 31, 1939. This examination was undertaken for the purpose of determining and verifying the cash transactions for the year, and of verifying the assets at the close of the year, as reflected by the records.

The results of our examination are presented in this report, which includes: (1) text of comments; (2) statement of assets of all funds, year ended December 31, 1939; (3) statements of receipts and disbursements of all funds, year ended December 31, 1939. A list of the statements is presented on the page following this text.

General Comments

In exhibit A is presented an analysis of the increase in assets of the association for the year ended December 31, 1939, showing in summary form the sources from which this increase was derived.

Details of the assets of all funds are presented in exhibit B. We examined securities of the association and confirmed bank balances with the depositories.

Details of the cash receipts and disbursements of the general fund, of THE JOURNAL of the Indiana State Medical Association, and of the medical defense fund are presented in exhibits C, D, and E.

Yours very truly,

GEO. S. OLIVE & CO.,
Certified Public Accountants.

EXHIBIT A

Indiana State Medical Association

ANALYSIS OF INCREASE IN ASSETS, ALL FUNDS
YEAR ENDED DECEMBER 31, 1939

Total assets, December 31, 1939—Exhibit B	**$51,349.24**
Total assets, December 31, 1938	**47,780.69**
Net increase	**$ 3,568.55**

Arising from the following sources:		
Excess of operating cash receipts over operating cash disbursements — general fund, year ended December 31, 1939:		
Receipts—Exhibit C	$26,361.87	
Disbursements—Exhibit C	24,718.79	
Excess of operating receipts		$ 1,643.08
Excess of cash receipts over cash disbursements — medical defense fund, year ended December 31, 1939		1,846.00
Excess of cash receipts over cash disbursements—The Journal of the Indiana State Medical Association, year ended December 31, 1939		199.47
		3,688.55
Less:		
Reduction of investment — Beachton Court Apartment bonds		120.00
Total net increase		$ 3,568.55

EXHIBIT B

STATEMENT OF ASSETS, ALL FUNDS, AT DECEMBER 31, 1939

General Fund:		
Cash on deposit—Exhibit C	$ 5,834.98	
Petty cash fund	200.00	
Investments:		
Fort Wayne, Indiana, school improvement bonds	3,000.00	
Indianapolis, Indiana, City Hospital bonds	5,000.00	
Marion County, Indiana, flood prevention bonds	3,000.00	
United States Treasury bonds	10,000.00	
Beachton Court Apartments, Chicago, bonds evidenced by certificate of deposit	3,680.00	
Rokeby Apartment Hotel, Chicago, bond evidenced by certificate of deposit	955.00	
Total general fund assets		$31,669.98
The Journal of the Indiana State Medical Association:		
Cash on deposit—Exhibit D		3,297.32
Medical Defense Fund:		
Cash on deposit—Exhibit E	6,381.94	
Investments:		
Fort Wayne, Indiana, School Improvement bonds	2,000.00	
Indianapolis, Indiana, City Hospital bond	1,000.00	
Marion County, Indiana, flood prevention bonds	2,000.00	
United States Treasury bonds	5,000.00	
Total medical defense fund assets		$16,381.94
Total assets—all funds—Exhibit A		**$51,349.24**

EXHIBIT C

COMPARATIVE STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS, YEARS ENDED DECEMBER 31, 1939, AND DECEMBER 31, 1938

GENERAL FUND

	Year Ended Dec. 31, 1939	*Dec. 31, 1938*	*Increase —Decrease*
CASH BALANCE AT BEGINNING OF YEAR	$ 4,191.90	$ 4,066.69	$ 125.21
Receipts:			
Membership dues	21,471.00	21,253.00	218.00
Income from exhibits	4,022.12	4,267.88	—245.76
Rokeby Liquidation Trust Distribution		10.00	—10.00
Beachton Court Liquidation Trust Distribution	120.00	80.00	40.00
Interest income:			
United States Treasury bonds	286.25	286.25	
Indianapolis, Indiana, City Hospital bonds	200.00	200.00	
Marion County, Indiana, flood prevention bonds	127.50	127.50	
Fort Wayne, Indiana, school improvement bonds	135.00	135.00	
Total receipts	$26,361.87	$26,359.63	2.24
BEGINNING BALANCE PLUS CASH RECEIPTS	$30,553.77	$30,426.32	$127.45
Disbursements:			
Transfers of applicable portion of dues to The Journal of the Indiana State Medical Association—Exhibit D	$ 6,246.00	$ 6,148.00	98.00
Medical defense fund—Exhibit E	2,283.75	2,265.75	18.00
Headquarters office expense	10,024.53	10,333.71	—309.18
Publicity committee	729.55	1,154.65	—425.10
Public policy	906.92	165.71	741.21
Council	208.04	528.59	—320.55
Officers	530.98	774.18	—243.20
Annual session	2,846.57	3,431.84	—585.27
Miscellaneous committees	692.16	794.00	—101.84
Postgraduate study	191.90	579.96	—388.06
Federal O.A.B. tax	58.39	58.03	.36
Total disbursements	$24,718.79	$26,234.42	—1,515.63
Cash balance at end of year	**$ 5,834.98**	**$ 4,191.90**	**$1,643.08**

(Exhibit B)

EXHIBIT D

STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS YEAR ENDED DECEMBER 31, 1939

THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION

BALANCE, JANUARY 1, 1939		$ 3,097.85
Receipts:		
Subscriptions—members—Exhibit C	$ 6,246.00	
Subscriptions—non-members	160.35	
Advertising	11,188.60	
Collections on accounts receivable	422.50	
Single copy sales	16.68	
Electrotypes	35.72	
Miscellaneous	2.00	
Total receipts		18,071.85
		$21,169.70
Disbursements:		
Editorial and management salaries	$ 7,764.80	
Printing	7,082.68	
Postage	718.71	
Electrotypes	465.54	
Office rent and light	736.52	
Office supplies	438.74	
Press clippings	125.93	
Federal O.A.B. tax	53.37	
Extra help	172.82	
Advertising commissions	261.85	
Copyright fees	24.72	
Bonding agency fees	20.00	
Miscellaneous	6.70	
Total disbursements		17,872.38
Balance, December 31, 1939—Exhibit B		**$ 3,297.32**

EXHIBIT E

STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS YEAR ENDED DECEMBER 31, 1939

MEDICAL DEFENSE FUND

BALANCE, JANUARY 1, 1939		$ 4,535.94
Receipts:		
Transfer of applicable portion of dues from the general fund—Exhibit C	$ 2,283.75	
Interest income:		
United States Treasury bonds	155.00	
Indianapolis, Indiana, City Hospital bonds	47.50	
Marion County, Indiana, flood prevention bonds	85.00	
Fort Wayne, Indiana, school improvement bonds	90.00	
Total receipts		2,661.25
		$ 7,197.19
Disbursements:		
Attorney's retainer fee	$ 600.00	
Malpractice fees	200.00	
Treasurer's bond	15.00	
Miscellaneous	.25	
Total disbursements		815.25
Balance, December 31, 1939—Exhibit B		**$ 6,381.94**

Dr. E. M. Shanklin, editor of THE JOURNAL. At the meeting of the Editorial Board in Fort Wayne it was decided to cut out the topic of the month feature. However, there will be some special numbers during the year. The May number will be the conservation of vision number and that issue will be in charge of the Conservation of Vision Committee. At this meeting of the Board a ruling was made on these foreign papers, by that I mean papers sent in from outside of the state. The Board made the official ruling that unless these papers possess unusual merit or unless they are sponsored by some Indiana medical group, the editorial office would summarily refuse to accept them. This is not a shutout, that is, we are not intending to keep out writers from outside the state.

At the secretaries'-editors' conference recently in Chicago men from five different states contacted various members of the Indiana delegation to take occasion to tell them that they thought we had one of the best journals in the United States. We have heard that quite often and I can say that because as editor of THE JOURNAL I don't have all to do with it.

(Mr. Hendricks spoke of the fact that since the topic of the month feature of THE JOURNAL had been discontinued a number of requests had been received from county society secretaries for an outline upon which they could formulate their county society programs for the year. Dr. Shanklin suggested that these requests be referred to the Committee on Medical Education and Hospitals and that that committee outline a series of subjects for county medical society meetings.)

UNFINISHED BUSINESS

1. *Payment of traveling expenses of committeemen of the state association.* For the information of the Council the following ruling made by the Executive Committee at its December 10, 1939 meeting was read:

> "The committee adopted the ruling that traveling expenses of committee members shall be paid on the basis of 3c a mile plus actual cost of hotels and meals when members are traveling by automobile, and upon the basis of actual railroad and Pullman fare when traveling by train. This action of the Executive Committee is in accordance with the resolution passed by the House of Delegates that traveling expenses of all committeemen be paid for attending regular call meetings of the committee, beginning with January 1, 1939."

a. *Payment of committeemen's expenses for attending committee meetings held during the annual session of the association.* Following discussion in which it was pointed out that the By-Laws specifically state that councilors' expenses in attending meetings held during the annual session of the association shall not be paid, Dr. Clark made the motion "that the same attitude be adopted toward expenses of committeemen who attend meetings held in conjunction with the state meeting as has always been held in regard to Council meetings which are held at that time." This motion was seconded by Dr. Wadsworth, and carried.

2. *Report by Committee on Study of Health Insurance upon Dr. Vore's suggestion.* The secretary read a letter from Dr. N. K. Forster, chairman of the Committee on Study of Health Insurance, in which he said, "Inasmuch as I will be out of town on January 7, it will be impossible for me to be at the council meeting. However, there are no further developments to report other than those presented to the House of Delegates."

3. *Annual Session at Fort Wayne.* Dr. Sparks and the Fort Wayne convention committees were highly commended for the fine work they did in arranging for the 1939 annual session, which was considered one of the best in the history of the association.

SUGGESTIONS AND PROPOSALS FOR 1940 ANNUAL SESSION AT FRENCH LICK

1. The dates set by the Executive Committee, Tuesday, Wednesday and Thursday, October 29, 30 and 31, 1940, were approved by the Council.

2. The following general outline for the program was approved:

Tuesday, October 29, 1940

Morning —Registration
Golf, trap shooting and other sports
Afternoon—Council meeting
Meeting of House of Delegates
Golf, continued
Evening —Smoker and stag party
Dinner for women physicians

Wednesday, October 30, 1940

Morning —Scientific meetings
Noon —Class and fraternity get-togethers and luncheons
Afternoon—Scientific meetings
Evening —Annual banquet

Thursday, October 31, 1940

Morning —Final meeting of House of Delegates and Council
Final scientific meeting
Adjournment at noon

3. *Convention facilities for 1940.* Report prepared by Dr. George Dillinger, general chairman of Convention Arrangements Committee, was presented to the Council.

4. *Budget for 1940 annual session.* The estimated budget for the local committee's expenses of $850.00 submitted by Dr. Dillinger was approved upon the motion of Dr. Clark, seconded by Dr. Barclay, with the provision that all convention bills be paid direct by the state association.



5. *Golf prizes.* The Council went on record as opposed to the solicitation of golf prizes. If any firms wish to donate prizes, these prizes may be accepted, providing the products of the firms wishing to give prizes are approved by the Council on Pharmacy and Chemistry of the American Medical Association. No prizes shall be accepted from firms whose products are not approved by the Council on Pharmacy and Chemistry of the A.M.A.

6. *Scientific exhibit.* The following letter from Dr. C. G. Culbertson, chairman of the Committee on Scientific Exhibit, was read:

"In view of our previous experience at the various places of the scientific exhibit, I feel that it has not been a worthwhile enterprise except when the society has met in Indianapolis when we were able to get good, interesting exhibits which were supplied with demonstrators to give the exhibit life. I suggest that the council should consider whether the exhibits are worth what they cost in money and effort, and for instance, would it be more valuable to apply this money to the obtaining of additional out-of-state speakers for the scientific program. I understand that a considerable number of state societies have no scientific exhibits at the state meeting. This, you would know better than I. I believe the major difficulty is with the money and time which we have to spend on the exhibit. We will have great difficulty in ever producing an exhibit which will compare in quality with the elaborate and magnificent exhibits which most of us are seeing at the national meetings.

"I raise these questions from a purely constructive viewpoint as I believe it is better to review the situation rather than to continue indefinitely a precedent whether or not it is worthwhile. If, after consideration of the advisability, the council wishes to continue the present policy in this regard, I recommend that the budget of $250 be allotted to the exhibits for the next year."

Following discussion, Dr. Barclay made the motion that "for this year the scientific exhibit be discontinued and the question be brought up again for discussion at the next winter meeting of the Council." Motion seconded by Dr. White, and carried. It was understood that if anyone has an exhibit which he wishes to show, he may do so at his own expense.

7. *Employment of professional medical stenographers.* Dr. Clark moved that the necessary professional assistance be obtained for reporting the meetings during the annual session. Motion duly seconded and carried.

Dr. White's motion that an electric recording machine be employed to record the proceedings of the House of Delegates was seconded by Dr. Clark and carried.

MEMBERSHIP REPORT

INDIANA STATE MEDICAL ASSOCIATION
DECEMBER 31, 1939

County Society	*Members in County*	*Members Dec. 31, 1939*	*Members Dec. 31, 1938*	*Loss—Gain*	*Eligible Non-Members.*	*New Members*	*Removed and Retired*	*Deceased*	*Ineligible*
First District									
*Posey	21	11	13	—2	4	1	4	1	1
*Vanderburgh	180	133	130	3	26	5	17	3	5
Warrick	20	12	13	—1	4	1	4	1	
Spencer	21	12	12		5	1	4		1
Perry	14	11	11		2	2	1		
Gibson	32	27	26	1	1	2	4	2	1
Pike	12	11	7	4	1	4			
Total	300	217	212	5	43	16	34	7	8
Second District									
*Knox	57	38	38		10		8	1	3
Daviess-Martin	32	27	24	3	5	2			
*Sullivan	28	24	22	2		1	3		1
Greene	24	17	16	1	5	1		2	
Owen	12	11	8	3	1				
Monroe	37	33	36	—3	3		2		
Total	190	150	144	6	24	4	13	3	4
Third District									
Lawrence	31	22	21	1	2	1	8	2	
Orange	21	14	15	—1	3		1	3	1
Crawford	9	2	4	—2	7				
Washington	12	9	7	2	1	2	1		1
Scott	8	5	5		1	1	2		
Clark	26	15	14	1	7	3	3	2	1
*Floyd	39	34	36	—2	1	3	1	1	3
Harrison	10	7	7		2			1	
Dubois	25	18	20	—2	6	1	2	1	
Total	181	126	129	—3	30	11	18	10	6
Fourth District									
Brown									
Bartholomew	33	24	28	—4	4		2		3
Decatur	20	18	18		1		1		1
Jackson	25	19	19		2	1	2	1	1
*Jennings	11	10	7	3		3	3		
Ripley	18	10	13	—3	6		2		
Jefferson	25	18	17	1	4	1	2	1	
Switzerland	7	5	5		2				
*Dearborn-Ohio	29	21	20	1		2	3		5
Total	168	125	127	—2	19	7	15	2	10
Fifth District									
Parke-Vermillion	37	24	23	1	9	2	3		1
Putnam	18	15	14	1	2	2	1	1	1
Vigo	131	116	121	—5	7	3	4	5	5
Clay	20	18	16	2	1			2	
Total	206	173	174	—1	19	7	8	8	7
Sixth District									
Hancock	21	19	19		1		1		
*Henry	42	31	35	—4	8				3
Wayne-Union	80	59	57	2	10		4	2	6
Rush	23	17	16	1	3		2	2	
*Fayette-Franklin	27	21	21		1	2	5		2
Shelby	29	18	18		7		3	3	
Total	222	165	166	—1	30	2	15	7	11
Seventh District									
*Hendricks	27	20	16	4	3	2	2	1	2
*Marion	811	606	584	22	134	34	44	14	33
Morgan	31	19	19		7		4	1	
*Johnson	23	17	14	3	4	4	2		
Total	892	662	633	29	148	40	52	16	35

County Society	M Ds in County	Members Dec. 31, 1939	Members Dec. 31, 1938	Loss—Gain	Eligible Non-Mems.	New Members	Removed and Retired	Deceased	Ineligible
Eighth District									
*Madison	97	77	77		12	3	8	2	3
*DelawareBlkford	100	77	72	5	16	5	5	1	4
*Jay	24	16	14	2	7	1		1	
Randolph	28	24	23	1	2	2	3	1	
Total	249	194	186	8	37	11	16	5	7
Ninth District									
Benton	17	13	13		2			1	2
Fountain-Warren	28	24	24		2		1	3	
*Tippecanoe	101	89	88	1	8	4	7	3	1
*Montgomery	44	29	30	—1	7	3	7	1	
Clinton	31	22	22		5		2		2
Tipton	17	12	12		3	2	2		
*Boone	26	15	17	—2	7		2	1	1
Hamilton	30	21	17	4	5	1	2		2
*White	9	2	2		7				
Total	303	227	225	2	46	10	23	9	8
Tenth District									
Lake	290	223	229	—6	44	7	21	3	6
Porter	29	24	23	1	4		2		
Jasper-Newton	26	16	19	—3	6	1	5	1.	
Total	345	263	271	—8	54	10	28	4	6
Eleventh District									
*Carroll	17	13	13		2	1	4		
*Cass	56	38	35	3	15	3	3	2	1
Miami	33	27	24	3	5	3		1	1
*Wabash	35	29	31	—2	3		5		1
Huntington	33	24	22	2	5	1	2	2	2
Howard	45	33	32	1	5	4	5		3
Grant	76	54	60	—6	11		8	4	4
Total	295	218	217	1	46	12	27	9	12
Twelfth District									
LaGrange	11	9	10	—1	2				
Steuben	21	9	11	—2	11		2		
Noble	30	26	26		2		2		
DeKalb	27	21	21		1		4		1
Whitley	16	12	9	3			3		3
Allen	207	168	157	11	13	14	10	6	14
Wells	27	20	17	3	6	1		1	
Adams	23	20	19	1	1	1		2	1
Total	362	285	270	15	36	16	21	9	19
Thirteenth District									
LaPorte	69	52	52		11	4	6	1	
*St. Joseph	178	147	144	3	15	5	14	4	8
Elkhart	77	67	67		6	4	3		2
Starke	6	5	5		1			1	
Pulaski	9	4	4		4		1		
Fulton	16	13	12	1	3				
Marshall	35	26	26		5	2		2	2
Kosciusko	28	22	23	—1	1		3		3
Total	418	336	333	3	46	15	27	8	15
Summary by Districts									
1st District	300	217	212	5	45	16	34	7	8
2nd District	190	150	144	6	24	4	13	3	4
3rd District	181	126	129	—3	30	11	18	10	6
4th District	168	125	127	—2	19	7	15	2	10
5th District	206	173	174	—1	19	7	8	8	7
6th District	222	165	166	—1	30	2	15	7	11
7th District	892	662	633	29	148	40	52	16	35
8th District	249	194	186	8	37	11	16	5	7
9th District	303	227	225	2	46	10	23	9	8
10th District	345	263	271	—8	56	10	28	4	6
11th District	295	218	217	1	46	12	27	9	12
12th District	362	285	270	15	36	16	21	9	19
13th District	418	335	333	2	47	14	27	8	15
Total	4131	3140	3087	41	579	160	297	97	148

* Physicians are listed in the counties in which they hold membership; not in the counties in which they reside.

LUNCHEON

The Council recessed for luncheon in private dining room No. 2 of the Columbia Club.

The following guests and committee chairmen were present and gave brief reports on the activities of their offices:

Dr. C. A. Nafe, chairman, Executive Committee, spoke of the meeting of the Governor's special hospital committee which was held to discuss the question of building additional hospitals in Indiana. This meeting was called as a result of a letter received by Dr. V. K. Harvey from Surgeon General Thomas Parran, asking for an estimate of the hospital needs in Indiana. Dr. Nafe and Dr. Harvey were asked to report further on this matter to the Council at its meeting immediately following the luncheon.

Dr. C. H. McCaskey, member of the Executive Committee.

Dr. R. L. Sensenich, member of the Board of Trustees of the American Medical Association. "I really don't know where to begin. We try to keep you fairly well informed on the things that are going on insofar as that information may be divulged without destroying the effectiveness of what we are trying to do. . . . There is action on all fronts all of the time. . . . I don't know if there has ever been such unanimity of opinion and such cooperation as there is at the present time—less complaint and criticism and more confidence and willingness to go along and help than at any time during previous years. One point of interest—there is closer cooperation and closer understanding with other medical organizations—the College of Surgeons, the College of Physicians, and the three hospital associations. The heads of the hospital associations have expressed willingness to cooperate to elevate standards and improve work done in their hospitals and to provide facilities which in many instances they should have and do not now have. . . . The work of the councils of the A.M.A. has grown tremendously. One point—no mention is made in your list of future medical meetings of the meeting of the Council on Industrial Health this month. That is very important.

"Lastly I want to say this. Those of us who are on the Board of Trustees are grateful for the letters of criticism of a constructive kind; we are grateful for suggestions; we are grateful if the

criticism is not exactly constructive, if you feel that way about it. Our task is difficult. Problems are widespread. It helps if we know we are supported, or on the other hand when you have some suggestions, we are grateful for them."

Dr. George Dillinger, delegate to the American Medical Association. "We hope to see a large group of Indiana physicians at the New York meeting in June."

Dr. Don F. Cameron, delegate to the American Medical Association. "In reference to the statement by Dr. Nafe that Indiana must make a decision soon as to whether we should ask for the establishment in this state of one of the proposed Government hospitals, I wish to emphasize my conviction that we should not ask for one unless the need for it is well established. One may be sure that if the Government furnishes the money for it, the Government will also direct its operation.

"We, in Fort Wayne, have recently had an example of this type of political medicine in operation. Dr. Greer came to our city a few months ago with his attorney, and, without any consultation with our medical society as such, or with its officers, selected one orthopedic specialist out of several competent ones and selected certain hospitals which alone are to be paid for their services in connection with the Federal Crippled Childrens' project. This action I am sure will be typical of all federally controlled hospitals and professional service, and I am sure that the less of it we have the better it will be both for the public and for the profession as a whole."

Dr. W. D. Gatch, dean, Indiana University School of Medicine. "I feel honored and delighted to be invited to attend this meeting and to talk to you. I was very much interested in Dr. Sensenich's remarks, the more so since I have just returned from California where I made some observations on medical practice there. . . . This is certainly a time when all good men should come to the relief of organized medicine and fight together.

"I want to call your attention to three developments in medical education. First, a great many of us are convinced that the time devoted to training is perhaps too long. The minimum amount of time demanded now to train a specialist is twelve years, with an expenditure of fifteen to twenty thousand dollars. Sooner or later this question is going to be investigated with a view to shortening the time in some way. The tendency now is to lengthen it. I propose to appoint a committee to investigate this matter.

"The second question is that of postgraduate instruction. No hospital can now get good residents or internes unless it provides them a thorough course of training. That means practically that the medical school has had to found another school. But I will say that the burden of this is not overwhelming. We are able to carry it on with very little expense and probably with benefit to everyone concerned.

"The third matter is recognition of general practice as a specialty. It seems to me that a great many of the ills that afflict the medical profession are due to its neglect of the general practitioner. No substitute will ever be devised for him. We have neglected him in our development of specialists in various lines of practice. A general practitioner ought to know more than any specialist, because he has to know the fundamental facts of all specialties. I am starting in a modest way a special course in dispensary, admitting room and laboratory, designed to fit men for general practice. I hope that this idea will be taken up by other medical schools and that it may ultimately lead to the establishment of a National Board for examining men who wish to specialize in general practice."

Dr. V. K. Harvey, director, State Board of Health. "We have been confronted during the past nine months with the administration of the pneumonia serum law. The Committee on Pneumonia of the state medical association has worked in cooperation with the State Board of Health. Pneumonia depots have been set up, one to each councilor district of the state. So far as I know we haven't had any complaints on how that is working out. It has come to my attention recently that in some places serum has not been available for patients amply able to pay for it. In those situations I have advised the doctors to go to the serum depot and get the serum they need and then have the patients and doctors replace the serum for which they are able to pay. These depots are serving a double purpose in that way.

"We are confronted with the administration of the pre-marital law March 1. Details of that are being worked out. We are sure that everything in regard to that will be in readiness to go some time in February. This means the approval of qualified private laboratories to do these tests. In addition to that, blood tests for those unable to pay will be made by the State Board of Health.

"I want to take this opportunity to thank the members of the Council, the Executive Committee, and the headquarters office for the fine cooperation they have given the State Board of Health during the past year."

Dr. O. W. Greer, director, Services to Crippled Children, Indiana State Department of Public Welfare. "I am very grateful for the opportunity to come here and make a short report on the activities of the Crippled Children's Division. I wish to express my gratefulness for the very fine cooperation we have had from the Executive Committee, the legislative and public relations committee, the House of Delegates, the State Board of Health and the central office of the state medical association, and particularly the splendid co-

operation of the liaison committee of the state medical association assigned to assist in developing a program for crippled children.

"In refuting the statement made by Dr. Cameron, may I call to the attention of this group that the appointment of an orthopedic agent in Fort Wayne for the State Department of Public Welfare was considered by the official liaison committee appointed to advise this division in the development of its program of services for crippled children? At the time the orthopedic agent was incorporated in the state plan of services for crippled children there was only one orthopedist in Fort Wayne certified by the American Board of Orthopedic Surgery and this orthopedist was designated on the recommendation of the official liaison committee.

"We are having a wide acceptance of our program by the physicians of the state generally. At the present time 2500 children are under treatment at the University Hospitals, the center at South Bend, and the newly started center in Fort Wayne. I am confident Dr. Barclay, chairman of our liaison committee, would appreciate any criticism concerning the operation of this plan.

"I wish to point out that we have budgeted a limited amount of funds to secure speakers of national reputation to come into your communities and address your groups on crippling."

Dr. George Dillinger, chairman, Convention Arrangements Committee. "Since my arrival I understand that our tentative program and budget have been accepted by the Council. I wish to inform the Council that we will attempt to conserve all of the funds that we can."

Dr. N. M. Beatty and *Dr. J. William Wright,* co-chairmen of the Committee on Public Policy and Legislation, thanked the councilors for their cooperation with the legislative committee. They also spoke of the fine cooperation of the Woman's Auxiliary to the Indiana State Medical Association in legislative activities.

Dr. H. B. Mettel, director, Bureau of Maternal and Child Health, State Board of Health. "Again I wish to thank the association through this body for the continued cooperation that our bureau has had. I am pleased to state that the organization of the 'Indiana Plan' has been really a great aid to the functioning of our bureau. . . . We have prepared a statewide report on the number of children that have been immunized against diphtheria and smallpox. No longer are lay groups sponsoring these movements.

"Courses that have been offered at the University this year are not being taken advantage of by the individual practitioners. For some reason we don't seem to be able to interest the general men for whom the course is built. We are, however, not defeated by this lack of interest. This summer, through Dr. Clark's newly organized department of postgraduate education at the University, we will offer a similar course in pediatrics.

"I would like to second Dr. Sensenich's remarks, and have them apply, about the approval of hospitals by national groups. A committee of this society worked for over a year making regulations for maternity homes and hospitals, largely due to efforts of men like Dr. Asher and Dr. Beckman. . . . I only want to emphasize what Dr. Sensenich said . . . In the licensing of maternity homes and hospitals, those who are delegated to this task are not trying to exert police powers but to interest all groups in maintaining better hospitals and better medical staffs."

Dr. Herman M. Baker, chairman, Committee on Medical Education and Hospitals, and chairman of the Liaison Committee with the Indiana State Department of Public Welfare. "I have no liaison committee report to make. In regard to the Committee on Medical Education and Hospitals, Dr. Gatch discussed medical education from the standpoint of the University and Dr. Mettel has commented on graduate work, particularly in connection with the course in obstetrics which was sponsored jointly by the University and the medical association. The committee of your association has worked with Dr. Mettel and we feel that this course should have had much better support than it has had. At the moment the committee is exploring the possibility of extension of graduate teaching centers similar to the ones established at Muncie and at Evansville. We are now exploring the possibility of three additional centers in the south end of the state and one in the central part of the state. This whole problem of graduate education is essentially an experimental one and in no particular community in a given state are the problems alike: They are essentially local problems and they probably are going to have to be met differently in the various communities. We get a bit discouraged sometimes in attempting to interest doctors in graduate education and in the various programs that are proposed for its development around over the state, but we are going to plug ahead and experiment and see what can be done with this problem and try to localize it in the various sections of the state."

Dr. R. L. Hane, chairman, Committee on Secretaries' Conference, called attention to the program for the secretaries' conference which will be held on January 21 in Indianapolis, and asked that the councilors extend an invitation to the members of their districts to attend this meeting.

Dr. E. O. Asher, chairman, State Board of Health Liaison Committee to Deal with Social Security Act. "There has been nothing spectacular in our relations with this welfare department that is headed by Dr. Mettel. The disappointing feature has been the lack of response to postgraduate efforts. This is something that I have thought of for years and this obstetrical course has been the acme of perfection in my eye but somehow it doesn't appeal to the men. You can't

interest men in general practice to really come out and take a short course unless there is some other incentive to it. We will keep working on it until some results are obtained."

Dr. I. C. Barclay, chairman, Liaison Committee with Indiana Crippled Children's Bureau. "It has been a pleasure to serve on this committee. One of the principal reasons for this is the fact that we have found that Dr. Greer has adhered so closely to the ideas and suggestions promulgated by the committee itself. I want you to feel assured that if you present any grievances or suggestions you may have to this committee they will be taken up by the committee as a committee with Dr. Greer and thrashed out."

Dr. J. H. Stygall, chairman, Anti-Tuberculosis Committee. "This committee has been functioning just one year and about sixty-five counties have appointed tuberculosis committees. We feel that the medical profession should supervise anti-tuberculosis work in cooperation with lay tuberculosis societies. A great deal of work is being done in testing high school students. We feel that this should be done in cooperation with the county medical society committee and the county tuberculosis society. We shouldn't leave that to lay organizations although we should cooperate with them.

"In regard to the hospital situation: In this county we have Sunnyside sanatorium. We have about 240 beds and we have 35 on the waiting list. If we build up to two beds to every death we would have 600 beds which the superintendent doesn't think will be necessary. We do need about 100 more beds for negroes and whites. If we overbuild at this time we soon would have too many beds. In regard to the Rockville sanatorium, we have 250 beds and 300 on the waiting list. I know that a good many counties have difficulty in getting patients in there. I feel that if there is any free government money coming for hospitals, perhaps that would be a good place to put it. The new tuberculosis hospital at New Albany with 150 beds is to be opened in June. That won't take care of the demand at this time. The southern part of the state really needs beds at this time. The unfortunate thing in tuberculosis is that patients are not diagnosed early enough. We need more x-rays for earlier diagnosis. In the sanatoria around the state about 75 per cent of the cases are advanced cases, hopeless by the time they get to the hospital."

Dr. E. E. Holland, chairman, Committee on Conservation of Vision. "This committee operated last year and as you know we introduced some resolutions at the last annual session on the treatment and prevention of blindness. At the present time we are trying to make a survey of trachoma in the state through the county societies. Ours is a program of education."

Dr. C. R. Bird, chairman, M-Day Committee. "M-day means mobilization day. When confronted with a national emergency the three component units of the United States Army, the regular army, the national guard, and the organized reserve become a consolidated whole and the army begins to mobilize. This committee is a new one, in its formative period. We expect to function. As you know, the medical department of the army consists of the medical, dental, veterinary and medical administrative and nursing corps. The committee feels that we could not meet the intent of this resolution unless we included representatives from these groups on this committee. That plan is in progress. In addition to that, to meet the second provision of the resolution we think it is necessary to include a representative of the Indiana section of the American Hospital Association as well as a representative of the Indiana Conference of Catholic Hospitals, so we will have a pretty sizable committee when it is formed."

Dr. E. L. Libbert, chairman, Committee on Physical Therapy. "I also represent an infant committee. I do so because the American Medical Association has recognized the American Congress of Physical Therapy as an official body. The American College of Surgeons, as well as the A. M. A., has established certain rules of procedure, certain requisites, which are to be followed by the hospitals in the operation of their physical therapy departments and those of us interested in that field realize that a great many of our profession are not acquainted with any of the ideals of physical therapy. It will become our duty to foster an educational program throughout the year and to try to acquaint as many men as possible with the legitimate idea of physical therapy. We realize perhaps we are not quite ready to be qualified as specialists but we want to try to put the work on an ethical basis, and we can do so only through the cooperation of the state organization, and we want your help."

Dr. J. S. Leffel, chairman, Medical Relief Committee. "So far as I know our committee is the youngest one, just two months old. We have had some meetings. This relief question is a question that has been prominent in the minds of the people for about ten years. We had the problem before that time but not much was said about it. Ten years have not solved the problem. To me it is impossible to think of the relief question in terms of only indigents because we have in every community not only indigents but people who are medically indigent when they are not otherwise indigent. There is much propaganda—the medical care of students in our universities, the medical care of employees of some industry, radio, popular fiction —all have a tendency to propagandize a government controlled medical care. It seems obvious to me that if we have a compulsory health insurance it will come through the avenue of medical relief because the proponents of any such measure will

base their theory on either inadequate care of the indigent or the excessive cost to those who are semi-indigent.

"Our committee so far has no plan. We don't believe at this time that there is a specific plan that can be offered that will fit all the communities in the state. I know of one county in which, according to the records, I believe $500 was spent for relief, and then there are other counties where it goes into millions. Obviously where a plan would fit one county it would not fit the other. Our committee is unanimous in its opinion that these relief questions must be settled through the local county medical societies. We urge that there be a genuine cooperation between the medical society, the overseers of the poor, the taxpayers organizations, and all groups concerned. We don't mean by that to do what Will Rogers said in David Harum, 'If you can't lick 'em, jine 'em,' but we do mean to get in with them and help guide them. Let the county societies take the initiative in any action in reference to relief."

Dr. E. F. Boggs, member of Medical Relief Committee.

Dr. Will A. Thompson, delegate from Wayne-Union county to the annual session. "As you all know, there is a law on the statute books to the effect that the undertaker's bill, the doctor's bill, and then the administrator's bill are preferential accounts. Now the Social Security law says there are no preferential accounts in the state except a first mortgage. If there is anything left in an estate the Social Security people say you can't have it, it goes against the first mortgage. My suggestion would be to get the state medical association, the state bar association and the state undertakers' association to change that law in the next legislature."

(The chairman of the Council suggested, as this is a matter for the legislative committee to handle, that Dr. Thompson confer with Dr. Beatty and Dr. Wright, co-chairmen of the legislative committee, and Mr. Stump, attorney for the state medical association.)

Albert Stump, attorney for the Indiana State Medical Association. "It has been about fifteen years since I became attorney for this association. I recall that suits charging malpractice have been filed in Knox, Dubois, Steuben counties, New Albany, South Bend, Elkhart, Hammond, Rensselaer, Lafayette, Kokomo, Tipton, Anderson, Columbus, Martinsville, Danville, Boonville, Indianapolis, Greenfield, Shelbyville, and Noblesville. We have lost three law suits. In one of them the jury returned a verdict for $500. In another case the jury returned a verdict for $2500. In another case a verdict for $5,000 was obtained, but on appeal the Appellate court reversed that verdict. We have lost two cases that have stayed lost, and except for those two cases which totaled $3,000, no doctor has had to pay who stood trial with the defense of the association. That is a pretty good record. However, I want to inform you how good the mere luck of this association has been with these cases that were in charge of your present attorney.

"In addition to that we have appeared in every session of the legislature since 1927, possibly since 1925, and in nearly every session of the legislature there has been a public hearing on some cult legislation. I think in each session of the legislature in private or public hearings I have appeared for the association. As a result of the legislation which we obtained in 1927 a number of suits grew up. The drafting of the law was a matter in which I took an active part, as I did also in the construction of the law in the courts. In each of the cases that went to trial we participated, and also in the cases that went to the Supreme and Appellate courts—the Pickard, Pitzer, Davis, Hill and Cole cases. In each of these cases which were reviewed by the Supreme or Appellate court our position was sustained. In the Cole case our names do not appear as attorneys in the case although we conferred with the attorneys who drafted the petition for the injunction and whose names appear in the case on appeal. I mention all this just to let you know that the law has been on the job. It has enjoyed being on the job. There is nothing more pleasant than knowing that the court is with you.

There formerly were a great many more cases threatened than at the present time. However, when a suit has been lost it has been followed by a number of threatened suits. In Evansville there was a most unfortunate result with respect to a case that had been filed in Princeton. Those cases where the verdict was large generally resulted in a lot more trouble in the same localities."

The chairman at this time introduced Mr. John M. Pratt of Chicago, executive administrator of the National Physicians' Committee for the extension of Medical Service, who spoke briefly on the purposes of the National Physicians' Committee and the progress to date, and answered questions in regard to the activities of the committee.

Dr. E. L. Bulson of Fort Wayne and *Dr. B. D. Ravdin* of Evansville, Indiana members of the Central Committee of the National Physicians' Committee, also were present for the luncheon.

MEETING FOLLOWING LUNCHEON

Dr. Ellison, chairman of the Committee to Study Cultists and Irregular Practitioners, made a report to the Council. The Council approved Dr. Ellison's report.

HOSPITAL BUILDING PROGRAM

Dr. Harvey discussed further the meeting held on January 5 with the Governor's Committee on Hospital Insurance to consider President Roosevelt's plan for the building of hospitals in localities where deficiencies in such facilities exist and where economic resources are limited. He explained some maps which had been prepared to show hospital facilities in Indiana. The consensus of opinion of

the members of the Governor's committee was summarized as follows:

1. That the greatest need in Indiana is for more adequate financing and equipping of the present hospitals.
2. That some of the existing hospital buildings throughout the State need additions or replacements.
3. That there is probably a need for additional beds for patients with tuberculosis.
4. A few communities need psychopathic wards as an addition to present hospital facilities.
5. Some of the larger industrial cities would probably request a communicable disease hospital if such were available.
6. It was pointed out that it has been the policy of the State of Indiana that hospitalization is a local problem except where the State maintains hospitals for the insane and two State hospitals for the care of tuberculosis.
7. The committee did not feel that it had sufficient data to make specific recommendations for the building of any general hospitals at this time but that the matter should be left open in case some community felt there was a local need for a general hospital.

Dr. Harvey. "The committee felt that it did not have sufficient information to make recommendations at this time but that the question should be left open. I believe we have left the gate open so that if any county society feels that there is need in that community for a hospital it can come forward and make a request for it."

NEW BUSINESS

1. *Contract with editor of* THE JOURNAL. Formal contract, prepared by the attorney of the association, was signed by Dr. Shanklin, editor of THE JOURNAL, and Dr. Austin, chairman of the Council.

2. *Cards in professional directory of* THE JOURNAL *carrying names of deceased physicians.* Dr. Clark's motion that "the card of a deceased physician be dropped from THE JOURNAL as soon as his death is known and that his family be refunded any money that has been paid in advance on a pro-rata basis the month following his death," was duly seconded and carried.

ELECTIONS FOR 1940

1. *Two members of Executive Committee for 1940.* Dr. Clark moved that Dr. C. A. Nafe and Dr. C. H. McCaskey, the present members, be re-elected for 1940. Motion duly seconded and carried.

2. *Chairman of Council.* Upon the motion of Dr. Clark, duly seconded, Dr. M. A. Austin was unanimously re-elected chairman of the Council for 1940.

There being no further business, the meeting was adjourned.

THOMAS A. HENDRICKS,
Executive Secretary.

INDIANA STATE MEDICAL ASSOCIATION
Executive Committee

December 10, 1939.

Roll call showed the following present: C. H. McCaskey, M.D., who served as chairman in the absence of Dr. C. A. Nafe; E. M. Van Buskirk, M.D.; A. M. Mitchell, M.D.; M. A. Austin, M.D.; A. F. Weyerbacher, M.D.; Albert Stump, attorney, and T. A. Hendricks, executive secretary.

Membership Report

Number of members Dec. 9, 1939	3124 (96 hon. mems.)
Number of members Dec. 9, 1938	3077
Gain over last year	47
Number of members Dec. 31, 1938	3087

The statements of receipts and expenditures for November for the Association committees and THE JOURNAL were approved.

Treasurer's Office

Dr. Weyerbacher reported that the balance in the medical defense fund checking account is $6,252.70. Upon the motion of Dr. Austin, seconded by Dr. Mitchell, the committee went on record approving the investment of $3,000 of this amount in United States Treasury certificates at this time and in a month or so the committee can then determine whether or not to purchase additional government certificates.

The suggestion of the treasurer that the annual audit of THE JOURNAL and association books be made by the George S. Olive and Company, who rendered this service last year was approved by the committee.

The committee adopted the ruling that traveling expenses of committee members shall be paid on the basis of 3c a mile plus actual cost of hotels and meals when members are traveling by automobile, and upon the basis of actual railroad and Pullman fare when traveling by train. This action of the Executive Committee is in accordance with the resolution passed by the House of Delegates that traveling expenses of all committeemen be paid for attending regular call meetings of the committees, beginning with January 1, 1939.

Follow-up Actions of 1939 Annual Session

The committee discussed the meaning of the action taken by the House of Delegates in regard to the State Board of Health reorganization legislation. It was the consensus of the committee that if there is any question concerning the meaning of the action of the House of Delegates, this can be corrected at the next meeting of the House of Delegates in 1940.

Statement in Maurice Early's column and resolution of the Indiana Pharmaceutical Association in regard to the State Board of Health reorganization legislation brought to the attention of the committee.

1940 Annual Session at French Lick

Dates of 1940 meeting set for Tuesday, Wednesday and Thursday, October 29, 30 and 31.

Letter from Dr. C. G. Culbertson, chairman of

the Scientific Exhibit Committee, concerning x-ray exhibits at the state meeting brought to the attention of the committee. Dr. Culbertson feels that it is inadvisable for the state association to continue to run the exhibit on the present basis. He suggests that the Indiana Roentgen Society should take charge of the exhibit and present an exhibit on a particular subject in its entirety rather than having "a hodgepodge of miscellaneous films" displayed by individuals. The committee suggested that Dr. Culbertson's suggestion be forwarded to the officers of the Indiana Roentgen Society.

Legislative, Legal and Social Security Matters

National

Dr. Austin made a report in regard to the National Physicians' Committee, literature in regard to which has been sent to the physicians of Indiana. The committee suggested that the Indiana members of the central committee of this organization be invited to attend the annual midwinter meeting of the Council on January 7 and present this matter to the Council. The suggestion was also made that these Indiana members might desire to have someone present at this time from the executive board of this organization.

Letter received from Dr. Olin West, telling of the present rumors concerning health legislation that may be proposed at the next session of Congress brought to the attention of the committee.

Article in Survey Graphic concerning Paul McNutt, the social security administrator, and his record in regard to health matters as governor of Indiana, discussed by the committee.

Movement for full-time health officer in the cabinet advocated by Dr. Walter Vest, president of the Southern Medical Association, and Dr. James R. Bloss, a member of the Board of Trustees of the A.M.A., brought to the attention of the committee. The committee suggested that this matter be discussed at the annual mid-winter meeting of the Council.

Local

Request received from Dr. James B. Maple, secretary of the Sullivan County Medical Society, for information in regard to fees and regulations that should be established in connection with the new marriage law, brought to the attention of the committee.

State Board of Medical Registration and Examination

Dr. M. R. Bascomb, of Calumet City, Illinois, is licensed to practice medicine in Illinois, but he is not licensed to practice medicine in Indiana. However, Dr. Bascomb has been accepted for a number of years as a member of the Lake County Medical Society. At the 1939 annual session a resolution was passed that the By-Laws be interpreted that no one shall be eligible for membership in the Indiana State Medical Association unless he is legally licensed to practice medicine in this state. This brought up a point of apparent conflict in cases such as Dr. Bascomb's. The Executive Committee feels that in cases where physicians have been members in local county societies for a number of years, such as in the case of Dr. Bascomb, the 1939 resolution concerning membership in the state association should not be retroactive.

Organization Matters

Committee appointments for 1940 made by Dr. Ruddell.

Letter received from Mrs. Ruddell thanking the Executive Committee for the flowers sent to Dr. Ruddell, who was in the hospital in New York on Thanksgiving day.

The committee approved the suggestion made by Dr. Charles Bird that the M-Day Committee of the state medical association be enlarged to contain representatives of the State Nurses and State Dental Associations.

State Board of Health

Statement received from the Connecticut State Medical Society to the effect that the state of Connecticut is to "scrutinize United States health grants" brought to the attention of the committee.

Group Hospitalization and Medical Service Plans

Bulletin received from the Academy of Medicine of Cincinnati which gives the position of the Ohio profession concerning group hospitalization programs, as follows:

> "The medical profession of Ohio believes that group hospitalization programs in the hands of reputable and efficient administrators, are of definite public benefit, providing such programs are limited to hospital services and do not include medical services, which inclusion would have an undesirable effect on the practice of medical specialties in hospitals and on the quality of the service rendered."

Letter and folder received from the Chicago Medical Society concerning the hospital plan of the Chicago Society for its own members. Suggestion made that copies of this material be sent to Dr. Forster and Dr. Vore.

Dr. Austin presented a report on the Michigan plan and the request was made that he make some changes in it and prepare it for publication in The Journal.

Postgraduate

Committee informed that Dr. Herman Baker, chairman of the Committee on Medical Education and Hospitals, is sending a letter concerning postgraduate course in obstetrics to 1500 physicians in the state.

Program of Fourth District postgraduate meeting brought to the attention of the committee and highly approved by the committee.

Medical Economics

The executive secretary reported upon his talk with Fred C. McClurg, chief counsel, Gross Income Tax Division, in regard to the right of the

Gross Income Tax investigators to see names of individual patients.

Letter received from New Jersey Medical Society in regard to developing a set of standard statewide by-laws applicable to professional staffs of hospitals brought to the attention of the committee. The committee was of the opinion that such a matter was up to each individual hospital.

Resolution passed by Cincinnati Academy of Medicine in regard to the policy of charging fees for filling out insurance blanks brought to the attention of the committee. The statement reads as follows:

"Insurance blanks and papers which a physician may be called upon to execute at the request of insurance companies or the insured should be classified as follows: First, those for the benefit of the insurance company; and second, those for the benefit of his patient (or claimant). The Council believes that a physician is justified in charging an insurance company for the filling out of papers furnished by the company in cases where such information is for the benefit of the insurance company. With respect to the second class of insurance papers where the information is for the benefit of the patient (or the claimant), the Council believes that the question of whether or not a fee should be charged the patient (or claimant) for such services is one involving a physician-patient relationship and that the final decision rests with the physician."

Complaint against rules for maternity hospitals. Letter received from Dr. Maple of Sullivan voicing a complaint against the rules recently promulgated for maternity hospitals by the State Department of Public Welfare. The committee referred the letter to Dr. E. O. Asher, chairman of State Board of Health Liaison Committee to Deal with Social Security Act. Dr. Asher's committee acted in a liaison capacity with the Department of Public Welfare and the State Board of Health in drawing up these regulations.

The executive secretary made a report in regard to the conference of trade association secretaries that was held in Bloomington on December 5, 1939.

Refugee Physicians

The possibility of refugee physicians aligning themselves with cultists as they cannot become legally licensed to practice medicine in Indiana under the present rules brought to the attention of the committee.

Reprint from the Harvard Law Review on "Refugees and the Professions" given to Albert Stump for study and a report at the next meeting of the committee.

Report made that refugee physicians are barred from practicing in Tennessee.

Communities Desiring Physicians

Numerous communities have indicated their desire for physicians to the headquarters office within recent months. The headquarters office is attempting to obtain physicians for these communities but in some cases this is proving difficult. The State Employment Bureau inserted a notice in the paper that New Carlisle, Indiana, near South Bend, needed a physician. According to the records of the state association Dr. John Luzadder is located there. The committee suggested that this matter be taken up with the councilor for that district and that a definite report on the situation be made to the committee at the next meeting.

Indigent Sick

Report of the meeting of the Medical Relief Committee with the township trustees made to the Executive Committee. The Executive Committee realizes that it has placed a difficult job in the hands of the Medical Relief Committee and it approves the policy adopted by the committee of making contacts with various groups having to do with medical relief and not making its principles and procedures too hard and fast at the present time.

WPA reports received for October and November.

Letter received from Samuel C. Cleland, member of the statewide study group, expressing the desire of his group to cooperate with the state medical association.

The Executive Committee approved the suggestion that Rollen Waterson, executive secretary of the Lake County Medical Society, be made an exofficio member of the Medical Relief Committee.

United States Pharmacopoeial Convention, Washington, May, 1940

Statement from Carl J. Klemme, of Purdue University, in regard to this convention brought to the attention of the committee. The committee approved the publication of any part of this statement in THE JOURNAL, which is thought by Dr. Shanklin to be appropriate.

Future Medical Meetings

January 7, 1940—Midwinter Council meeting. The chairmen of the various committees of the state association are to be invited to attend this meeting and make a report if they feel they have anything special to report.

January 21, 1940—Secretaries' Conference. Program filled with exception of dinner speaker.

February 11, 1940—National Conference on Medical Service, Chicago (the old Northwest Regional Conference).

Report on annual conference of state secretaries made to the committee by the executive secretary.

The Journal

Letter from Mr. Klemme, o. k. to use as the Editorial Board sees fit.

Letter from the secretary of the Wisconsin Medical Society asking for an exchange copy of THE JOURNAL for a member of the Wisconsin

Council brought to the attention of the committee. The committee decided to send a few sample copies of the Wisconsin Journal to Dr. Austin and if he feels we should exchange with the chairman of the Council of Wisconsin, the JOURNAL office is authorized to do so.

Editorial on athletic "trainers" and letter from F. R. N. Carter, M.D. Suggestion made that this be discussed at the secretaries' conference.

WOMAN'S AUXILIARY

President—Mrs. W. E. Tinney, Indianapolis.
President-elect—Mrs. C. R. Bock, Muncie.
Corresponding Secretary—Mrs. Byron Rust, Indianapolis.
Treasurer—Mrs. C. V. Rozelle, Anderson.

The State Auxiliary extends a warm welcome to the two newest county auxiliaries.

The Woman's Auxiliary to the Morgan County Medical Society completed its organization December thirteenth by election of officers, after a joint dinner meeting with members of the Society at the Martinsville Country Club. Mrs. William E. Tinney, state president, and Mrs. Fred Wishard, organization chairman, were present. Mrs. Patrick Murphy of Morgantown was elected president.

The Woman's Auxiliary to the Carroll County Medical Society was organized at Delphi, December twelfth, with Mrs. Charles Crampton as president.

THE DELAWARE-BLACKFORD COUNTY AUXILIARY

Officers of the Woman's Auxiliary to the Delaware-Blackford County Medical Society for 1939-1940

President.....Mrs. Robert D. Turner
Vice-President.....Mrs. R. M. Butterfield
Secretary.....Mrs. R. M. McMichael
Treasurer.....Mrs. John H. Bowles
Publicity Chairman.....Mrs. T. R. Owens



Mrs. Robert Turner

On April 20, 1928, the Auxiliary was organized with a membership of forty-three. At first the meetings were purely social, and were held at the homes of members, but as the need presented, definite lines of work were undertaken. With its purpose to further the aims of the local, state, and national medical societies, the auxiliary meets every third Tuesday afternoon monthly from September to June. In June a joint meeting is held with the husbands at the Medical Society's annual picnic. Year books inform members of the programs.

The meetings are held in the sewing room at the Nurses' Home, Maria Bingham Hall, and at the business sessions, matters of interest to the medical profession are discussed. Frequently members lunch at the hospital cafeteria. The membership is divided into nine committees, each responsible for the program of a meeting. To the Christmas party, each member brought gifts to be distributed by the Visiting Nurse Association. Travel talks, musicals, bridge, comprise the social programs.

The Auxiliary projects are: *Hygeia* subscriptions, working for Visiting Nurses Association and Tuberculosis Association, making supplies for the hospital, furnishing a book or magazine of a medical nature for the medical library of the hospital, giving financial aid to the Community Fund and Red Cross, memorials honoring deceased members to the Visiting Nurse Association, aid in the cancer and diphtheria campaigns, contribution of food to the hospital during Delicacy Week, sponsoring health meetings, and contribution of prize money for health essays in the schools. The Auxiliary presented a call-board to the medical society for use at medical meetings. The present membership is 54 and members are represented in the Department of Public Welfare and Family Welfare Service Boards, Visiting Nurse Association, Anti-Tuberculosis Association, Y.W.C.A., Girl Scout, Day Nursery, Woman's Auxiliary of Ball Memorial Hospital, and other organizations looking after public health and welfare, as well as social and church groups.

INDIANA STATE BOARD OF HEALTH

Bureau of Communicable Diseases

Monthly Report, November, 1939

Diseases	*Nov., 1939*	*Oct., 1939*	*Sept., 1939*	*Nov., 1938*	*Nov., 1937*
Tuberculosis	145	92	141	137	137
Chickenpox	315	128	25	275	233
Measles	55	30	19	37	97
Scarlet Fever	540	320	204	495	579
Smallpox	8	24	5	44	73
Typhoid Fever	18	8	54	14	20
Whooping Cough	162	155	260	48	109
Diphtheria	91	89	67	98	132
Influenza	22	10	24	39	102
Pneumonia	31	23	33	60	71
Mumps	257	54	35	104	16
Poliomyelitis	10	19	12	0	0
Meningitis	2	2	0	4	6
Tularemia	6	6	2	8	4
Undulant Fever	8	8	3	8	2
Septic Sore Throat	20	4	0	0	0
Dysentery	2	0	0	0	0
Hydrophobia	1	0	0	0	0
Gonorrheal Conjunctivitis	1	0	0	0	0
Trachoma	2	2	9	0	0

LOCAL SOCIETIES

CORRECTIONS

In the January JOURNAL, errors were made in the reports of 1940 officers for Adams, Clark, and Howard counties. The correct reports are as follows:

ADAMS COUNTY:
President, Floyd L. Grandstaff, Decatur
Vice-president, W. E. Smith, Decatur
Secretary-treasurer, H. F. Zwick, Decatur

* * *

CLARK COUNTY:
President, N. C. Isler, Jeffersonville
Vice-president, Marshall Varble, Jeffersonville
Secretary-treasurer, John H. Baldwin, Jeffersonville

* * *

HOWARD COUNTY:
President, F. S. Cuthbert, Kokomo
Vice-president, W. J. Marshall, Kokomo
Secretary-treasurer, John M. Kimmick, Kokomo

* * *

OFFICERS OF COUNTY SOCIETIES FOR 1940

BARTHOLOMEW COUNTY:
President, Lyman Overshiner, Columbus
Vice-president, W. G. Sigmund, Columbus
Secretary-treasurer, B. K. Zaring, Columbus

* * *

CASS COUNTY:
President, W. K. Newcomb, Royal Center
Secretary-treasurer, L. J. Hillis, Logansport

* * *

CLINTON COUNTY:
President, Bruce A. Work, Frankfort
Vice-president, Benson Ruddell, Frankfort
Secretary-treasurer, M. W. Erdel, Frankfort

* * *

DECATUR COUNTY:
President, D. D. Dickson, Letts
Vice-president, R. M. Blemker, Greensburg
Secretary-treasurer, B. L. Mahuron, Greensburg

* * *

DE KALB COUNTY:
President, John Showalter, Waterloo
Secretary-treasurer, C. B. Hathaway, Butler

* * *

GREENE COUNTY:
President, George C. Porter, Linton
Secretary-treasurer, Harry G. Rotman, Jasonville

HANCOCK COUNTY:
President, C. H. Bruner, Greenfield
Vice-president, H. K. Navin, Fortville
Secretary-treasurer, J. R. Woods, Jr., Greenfield

* * *

JEFFERSON COUNTY:
President, Luther F. Beetem, Madison
Vice-president, E. C. Cook, Madison
Secretary-treasurer, O. A. Turner, Madison

* * *

JOHNSON COUNTY:
President, Harry E. Murphy, Franklin
Vice-president, Paul Woodcock, Greenwood
Secretary-treasurer, Florence Blackford, Franklin

* * *

KNOX COUNTY:
President, Paul Arbogast, Vincennes
Vice-president, R. C. Meyer, Vincennes
Secretary-treasurer, Helen Richards, Vincennes

* * *

LA GRANGE COUNTY:
President, Frank Wade, Howe
Secretary-treasurer, W. O. Hildebrand, Topeka

* * *

LA PORTE COUNTY:
President, R. B. Jones, La Porte
Vice-president, R. L. Kerrigan, Michigan City
Secretary-treasurer, Robert Fargher, La Porte

* * *

MARSHALL COUNTY:
President, P. R. Irey, Plymouth
Vice-president, R. B. Miller, Argos
Secretary-treasurer, L. W. Vore, Plymouth

* * *

MIAMI COUNTY:
President, H. E. Line, Chili
Secretary-treasurer, H. W. Eikenberry, Peru

* * *

MONROE COUNTY:
President, P. T. Holland, Bloomington
Vice-president, Rodney D. Smith, Bloomington
Secretary-treasurer, Neal E. Baxter, Bloomington

* * *

MONTGOMERY COUNTY:
President, H. C. Wallace, Crawfordsville
Vice-president, J. W. Humphreys, Darlington
Secretary-treasurer, J. M. Kirtley, Crawfordsville

* * *

ORANGE COUNTY:
President, E. C. Boyd, West Baden Springs
Vice-president, H. L. Miller, West Baden Springs
Secretary-treasurer, George Dillinger, French Lick

OWEN COUNTY:
President, R. H. Richards, Patricksburg
Secretary-treasurer, Julia S. Thom, Gosport

PARKE-VERMILLION COUNTY:

President, A. E. Sabin, Dana
Secretary-treasurer, Casper Harstad, Rockville

* * *

SPENCER COUNTY:

President, J. C. Glackman, Rockport
Vice-president, C. D. Ehrman, Rockport
Secretary-treasurer, V. V. Schriefer, St. Meinrad

* * *

VIGO COUNTY:

President, H. R. Vandivier, Terre Haute
Vice-president, M. C. Topping, Terre Haute
Secretary-treasurer, A. M. Mitchell, Terre Haute

* * *

WARRICK COUNTY:

President, W. C. Stover, Boonville
Vice-president, Bowen Hoover, Boonville
Secretary-treasurer, C. L. Luckett, Boonville

* * *

WELLS COUNTY:

President, George B. Morris, Bluffton
Vice-president, H. B. Smith, Bluffton
Secretary-treasurer, Wm. A. Gitlin, Bluffton

* * *

WHITLEY COUNTY:

President, W. E. Wilkins, South Whitley
Secretary-treasurer, Park Huffman, South Whitley

* * *

SEVENTH DISTRICT OFFICERS FOR 1940

President, Russell Sage, Indianapolis
Secretary, E. W. Dyar, Indianapolis
Councilor, C. J. Clark, Indianapolis

LOCAL SOCIETY REPORTS

Adams County Medical Society members met at Decatur, January twelfth. Attorney E. L. Koenemann of Fort Wayne was the guest speaker, his subject being "The Business Problems of the Medical Profession."

* * *

Bartholomew County Medical Society members met at the Colonial Inn, December twentieth, for a business meeting and election of officers. Attendance numbered fourteen.

* * *

Cass County Medical Society held a meeting at the Logansport State Hospital, December eighteenth, for the annual Christmas party and election of officers.

Clinton County Medical Society held a meeting at Frankfort, January second, with Dr. M. W. Erdel as principal speaker. Dr. Erdel's subject was "Vasomotor Rhinitis." Extremely cold weather prevented a large attendance.

* * *

Dearborn-Ohio County Medical Society members held a meeting at the Aurora Public Library, January fourth, to hear Dr. F. A. Streck of Lawrenceburg talk on "The Anemias."

* * *

Decatur County Medical Society members met at Greensburg, December twentieth, for a business meeting.

* * *

Delaware-Blackford County Medical Society members and guests held their annual formal dinner party at the Hotel Roberts in Muncie, December nineteenth.

* * *

Delaware-Blackford County Medical Society members held a meeting at Muncie in the Hotel Roberts, January sixteenth, with forty in attendance. Dr. H. E. Bibler spoke on "Immunology" and reported 4,400 out of a possible 9,000 school children immunized against diphtheria and vaccinated against smallpox since January 1, 1940. This is the highest percentage the city has ever obtained.

The society voted to accept $500 as a gift from benefits of the President's Ball to be used as it sees fit in the prevention and treatment of infantile paralysis.

* * *

Fayette-Franklin County Medical Society held a meeting at McFarlan Hotel, January sixteenth. A paper on "Treatment of Pneumonia" was presented. Attendance numbered eighteen.

* * *

Floyd County Medical Society held a meeting at New Albany, January twelfth. Moving pictures on eclampsia and its prevention were shown. Attendance numbered fourteen.

* * *

Fort Wayne (Allen County) Medical Society held a meeting at the Chamber of Commerce, December nineteenth. This was the annual Christmas party for members and guests. The after dinner speaker was Axel Christensen of Chicago. Attendance numbered 177.

At the December twenty-sixth meeting of the Fort Wayne society, thirty were present. This was the regular monthly business meeting; no scientific program was presented.

On January second, the Fort Wayne Medical Society met in the Chamber of Commerce Building,

Fort Wayne, to hear Dr. John J. Hayes talk on "The Pathology of Appendicitis." The talk was illustrated with colored lantern slides. Attendance numbered forty.

* * *

Fort Wayne (Allen County) Medical Society met at the Chamber of Commerce Building, January sixteenth, when Dr. Harry A. Towsley, of Ann Arbor, Michigan, talked on "The Acute Exanthematous Diseases." Attendance numbered fifty-four. Dr. Towsley's presentation included a color moving picture demonstration.

* * *

Fountain-Warren County Medical Society held a meeting January fourth at Veedersburg, with seventeen in attendance. A three-reel film on "Prevention of Eclampsia" was shown and was followed by general discussion.

* * *

Gibson County Medical Society members held their regular monthly meeting at the Hotel Emerson, Princeton, January eighth. Dr. Minor Miller of Evansville was the speaker of the evening; his subject was "How a Venereal Clinic Should Be Run." Physicians are planning to open a clinic in Princeton soon.

* * *

Grant County Medical Society members and their wives held a dinner meeting at the New Marion Hotel in Marion, December twenty-eighth.

* * *

Hancock County Medical Society members held a meeting at the Columbia Hotel, Greenfield, in December, for election of officers for 1940.

* * *

Howard County Medical Society held a meeting in the Courtland Hotel, Kokomo, January twelfth, with twenty-four in attendance. Moving picture films on eclampsia were shown.

* * *

Indianapolis (Marion County) Medical Society members and guests were entertained at the Indianapolis Athletic Club, January ninth, when the society held its annual party. Dancing to Louie Lowe's orchestra followed dinner, and bridge supplied the entertainment for many.

On January sixteenth, the regular meeting of the Indianapolis society was held at the Athletic Club. Speakers included Drs. Murray De Armond, E. V. Hahn, Larue D. Carter, and Robert L. Glass.

* * *

Johnson County Medical Society members met at Franklin, December twentieth, for election of officers for 1940.

Knox County Medical Society held a meeting at the Jewel Cafe in Vincennes, January ninth. Dr. George Stevens of Indianapolis was the principal speaker, his subject being "The Indiana Program of Mental Hygiene." Attendance numbered fifteen.

Officers for the Knox County society were elected for 1940 at the December nineteenth meeting in Vincennes.

* * *

Lake County Medical Society held its January meeting at St. Margaret's Hospital in Hammond, Thursday, January eleventh. According to the program, there was a triple-feature attraction, co-starring:

I. Dr. A. Hoyne, Chicago, whose subject was "Meningitis."

II. Dr. James A. Connor, Chicago, who talked on "Diphtheria."

III. Dr. Samuel O. Levinson, Chicago, who discussed "Scarlet Fever."

Dr. Hoyne is superintendent of the Chicago Municipal Contagious Hospital, Dr. Connor is assistant to Dr. Hoyne, and Dr. Levinson is director of the serum center at Michael Reese Hospital.

The secretary reports "one of the best meetings we have had."

The next meeting of the society will be held at St. Mary's Mercy Hospital, in Gary, on Thursday, February eighth, when Dr. Leroy Sloan will discuss "Common Upper Respiratory Infections and their Complications"; Dr. Sidney Portis will talk on "Differential Diagnosis of Right Upper Quadrant Pain," and Dr. Louis Lieter will discuss "Common Causes of Hypertension."

* * *

La Porte County Medical Society members met at the American Restaurant in La Porte, December twenty-first, to hear Dr. Carlo Scudero of Chicago talk on "Fractures of the Wrist." Attendance numbered twenty-nine.

* * *

La Porte County Medical Society members met in the Spaulding Hotel, Michigan City, January eighteenth, when the entire meeting was given over to a discussion of a new plan for medical relief in La Porte county. Twenty-five attended the meeting.

* * *

Madison County Medical Society members held their annual business meeting at St. John's hospital in Anderson, December eighteenth. Officers for 1940 were elected, and the organization voted to join in a movement to secure larger facilities for the hospital.

At the January fifteenth meeting, Dr. C. S. Wright of Anderson talked on "X-ray Demonstra-

tion of Unusual Lung Conditions." Attendance numbered twenty-four.

* * *

Marshall County Medical Society members met at Plymouth, January tenth, to hear Dr. Homer Burke of Lapaz talk on "Medical Practice in Africa." Attendance numbered sixteen.

* * *

Monroe County Medical Society members held a business meeting in the Graham Hotel, Bloomington, January tenth.

* * *

Montgomery County Medical Society members met at the Crawfordsville Country Club, December twenty-first, with twenty members and twenty-three guests present. This was the annual Christmas party. Election of officers for 1940 was held.

* * *

Muncie Academy of Medicine met in the Hotel Roberts, January ninth, to hear Dr. Arthur M. Alden of St. Louis talk on "Deep Neck Infections."

* * *

Northeastern Indiana Academy of Medicine met at the Kendall Hotel in Kendallville, January twenty-fifth. Dr. A. N. Ferguson of Fort Wayne spoke on "Heart Disease."

* * *

Owen County Medical Society members met at the Highway Grill, Spencer, December fifteenth, for a business meeting and election of officers.

* * *

Parke-Vermillion County Medical Society met at the Clinton hospital, December twentieth. Dr. Arthur B. Richter of Indianapolis talked on "Cardiovascular-Renal Diseases." Attendance numbered sixteen.

* * *

Putnam County Medical Society held a meeting at Greencastle, January eighteenth. A film "Contagious Diseases" was shown by a representative of the State Board of Health.

* * *

Randolph County Medical Society members met at the Randolph county hospital in Winchester, January eighth, to hear Dr. Forrest Kirshman of Muncie talk on "Subacute Bacterial Endocarditis."

* * *

Rush County Medical Society met January ninth at Rushville, with fourteen members present. Dr. Deprez Inlow of Shelbyville spoke on "Surgical Abdomens."

* * *

St. Joseph County Medical Society met at South Bend, January ninth, for installation of new officers. Attendance numbered forty.

* * *

Tippecanoe County Medical Society members met at Lincoln Lodge, January ninth. Moving pictures presented by Mr. Smallwood of the Indiana State Board of Health composed the program. Attendance numbered forty-five.

* * *

Vanderburgh County Medical Society members met in the Hotel Vendome, Evansville, January ninth for its monthly postgraduate session. Dr. Louis Segar of Indianapolis was principal speaker, his subject being "Communicable Diseases of Childhood."

* * *

Wabash County Medical Society held a meeting at Wabash, January third. Dr. C. J. Clark of Indianapolis was the guest speaker, his subject being "The Treatment of Pneumonia." Attendance numbered nineteen.

* * *

Wayne-Union County Medical Society members attended the monthly dinner meeting of the organization at the Richmond-Leland Hotel in Richmond, January eleventh, when Dr. Gordon McKim of Cincinnati talked on "Kidney Infections."

* * *

ELEVENTH DISTRICT

The Eleventh District Medical Society held a called meeting of the physicians of the Eleventh Councilor District and of Blackford County, December twenty-seventh. This was a dinner meeting held at the Hotel Bearss in Peru. The purpose of the meeting was to show the members' appreciation of the services of their congressmen. Congressman Harness of Kokomo addressed the meeting.

. . . For my part I am still unconvinced that the family doctor is an anachronism. I still want somebody to save me from unsuitable or excessive specialist advice; I need someone to co-ordinate the findings of specialists and discount them if necessary; and above all I want someone who is willing to talk to me, at length, about my migraine, my little boy's delinquencies, my wife's recent strangeness, my baby's inoculation, and my daughter's desire to marry a man with asthma.

—Onlooker, Lancet

BOOKS

ACCEPTED FOODS, AND THEIR NUTRITIONAL SIGNIFICANCE, a publication of the Council on Foods of the American Medical Association. Cloth. Price, $2.00, postpaid. Pp. 512; Chicago: American Medical Associatiion, 1939.

Accepted Foods, and Their Nutritional Significance contains descriptions and detailed information regarding the chemical composition of more than 3,800 accepted products, together with a discussion of the nutritional significance of each class of foods. The book provides also the Council's opinion on many topics in nutrition, dietetics and the proper advertising of foods.

This book will be a welcome reference book for all persons interested in securing authoritative information about foods, especially the processed and fabricated foods which are widely advertised. The accepted products are classified in various categories: fats and oils; fruit juices, including tomato juice; canned and dried fruit products; grain products; preparations used in the feeding of infants; meats, fish and sea foods; milk and milk products other than butter; foods for special dietetic purposes; sugars and syrups; vegetables and mushrooms; and unclassified and miscellaneous foods including gelatin, iodized salt, coffee, tea, chocolate, cocoa, chocolate flavored beverage bases, flavoring extracts, dessert products, baking powder, cream of tartar, baking soda, cottonseed flour. There is a suitable subject index as well as an index of all the manufacturers and distributors of food products that stand accepted by the Council on Foods.

Accepted Foods is indispensable for the library of every physician concerned with foods and nutrition.

AN INTRODUCTION TO MEDICAL MYCOLOGY. By George M. Lewis, M.D., and Mary E. Hopper, M.S. 315 pages with 69 illustrations. Cloth. Price $5.50. Year Book Publishers, Inc., Chicago, 1939.

At long last there is a practical book on medical mycology. It is an "Introduction to Medical Mycology" by George M. Lewis and Mary E. Hopper. The authors, probably because of their own interest in the literature of these diseases, have made every effort to present the subject clearly and concisely in terms which the average physician as well as the dermatologist can understand.

The book is in two parts, the first on clinical, theoretic, and experimental aspects of the subject and the second on laboratory methods. No effort is made to acquaint one with the rare mycoses but the common ones are very thoroughly considered. Illustrations are excellent and numerous. Methods for the diagnosis and treatment of the various types of mycotic infections are detailed.

The second part, which deals with laboratory procedures for the identification of pathogenic fungi is the first practical presentation of the subject the reviewer has seen.

George M. Lewis and Mary E. Hopper have seen and treated on an average of 3,000 cases of fungus infection each year for the past 8 years in the Division of Dermatology, Skin and Cancer Unit, New York Post-Graduate Medical School and Hospital, Columbia University. A large unit for cutaneous mycology is an integral part of the Division. This book is the essence of the knowledge and experience gained in their unusual opportunity.

ARE YOUR 1940 DUES PAID?

ABSTRACTS

NEW ARMY MEDICAL LIBRARY AND MUSEUM

"The acquisition of a site for a new Army Medical Library and Museum building in Washington was recommended by the President in the budget for the fiscal year of 1941, which he submitted to Congress January 4," *The Journal of the American Medical Association* for Jan. 13 states. "The budget contemplates that the Congress shall appropriate $600,000 for the purchase of the site and for preliminary expenses in connection with the building to be constructed and that the site be selected on East Capitol Street, in Washington, adjacent to the Congressional Library group. Thus moved one step further toward fruition the hopes and petitions of physicians that a structure be provided in which the vast collection of invaluable medical literature comprising the Army Medical Library, often spoken of as the Surgeon General's Library, may be safely and adequately housed. The Seventy-fifth Congress authorized the construction of such a building to cost $3,750,000 but did not appropriate any money to make effective its authorization. The recommendation contained in the budget for 1941 is now before the Committee on Appropriations of the House of Representatives."

"SOLVENT" USED IN DRY CLEANING IS NEW OCCUPATIONAL HAZARD

The recovery of a young man from the effects of a three months' exposure to a "solvent" used in a dry cleaning plant is reported by Leo E. Braunstein, M.D., Schenectady, N. Y., in *The Journal of the American Medical Association* for Jan 13.

The case was characterized by jaundice, or yellowness of skin and eyes, brought about by the effects of the solvent, petroleum distillate (the solvent), eruption on the hands, anemia, stomach disorders and albumin and sugar in the urine. This is another occupational disorder that should receive attention, especially as the medical literature implies that it is rare for petroleum products to cause disorders of the liver. Usually they affect the nervous system.

"It has been considered safe to use 'solvent' in large quantities, and the employees handle it with impunity," he says. "I believe that the medical profession and the industry should be aware of such possibilities so that this hazard may be recognized and treated."

FINNISH WAR REVEALS THE RED CROSS AS INTERNATIONAL BOND OF UNION

The international bond of union provided by the Red Cross in time of war is emphasized by a special Finland correspondent in a letter in *The Journal of the American Medical Association* for Jan. 20 which declares:

"It is perhaps through the Red Cross that Finland has received more moral and material foreign help than through any other source.

"The generosity with which the national Red Cross societies of other countries have come to the aid of Finland's Red Cross is almost overwhelming. The news that Red Cross ambulances are on their way to Finland has also proved most cheering.

"The axiom that effective peacetime work is the best preparation for the work of the Red Cross in war is being confirmed daily at the present time. For many years the Finnish Red Cross has done yeoman service in the social field, notably for child and infant welfare.

"When war broke out, the Red Cross was well prepared. The Ladies' Committee of the Red Cross had

issued a leaflet, printed in Finnish on one side and in Swedish on the other, telling the public what to do on hearing an air raid warning. The same committee has also given demonstrations in air raid precautions."

MINNESOTA DOCTOR RECOMMENDS FREER DIETS FOR ELDERLY PEOPLE

Freer diets and less fear of overindulgence by older people would greatly improve their nutritional status, E. L. Tuohy, M.D., Duluth, Minn., maintains in *The Journal of the American Medical Association* for Jan. 20.

Stressing the fact that ample diets are essential in order to obtain the necessary protective elements (vitamins), Dr. Tuohy declares that "all sorts of dire vicissitudes have been erroneously attributed to over-indulgence. The elderly tolerate four light meals better than two heavy ones. When heavy meals distress them they leave out many articles, supposedly because of qualitative distress.

"The fields, the garden and the grocery store are still the correct source of routine supply of the protective nutritional elements. Persons with normal appetites who get satisfaction from a wide variety of foods obtain through mother nature's liberality as much of these substances as they need.

"However, many persons either do not or cannot eat, and acute and more or less temporary deficiency conditions arise in which the drug store's pharmaceuticals are of the greatest aid in restoring balance.

"W. B. Castle, M.D., Boston, has vividly stated that vitamins are to the body what oil is to the crank case; hard driving increases both the need and the consumption of oil. So suspect vitamin B deficiency when energy wastage has occurred or gross water loss, as in diabetes, severe vomiting or diarrhea."

Although he recognizes that the use of vitamin concentrates is often based on sound research and reasonable premises, Dr. Tuohy urges discrimination in their use. "A huge volume of vitamin concentrates is sold to the public," he says. "Few physicians have failed to order the various combinations or isolated products. We have used them much as our predecessors used 'bitter tonics.' Reasonable honesty compels us to weigh the need of much of this treatment. The claims that vitamin B_1 has a toning effect on the digestive tract are supported. It may be given in substantial doses, especially when elderly patients are pitted against severe physiologic impairment. This selective utilization promises to promote sanity in the field of vitamin treatment."

LIPSTICK DYE MAY CAUSE SKIN ERUPTION

A dye contained in an indelible lipstick she was using caused many skin eruptions on a woman whose case is reported by Rudolph Hecht, M.D., B. Z. Rappaport, M.D., and Leon Bloch, M.D., Chicago, in *The Journal of the American Medical Association* for Dec. 30.

These changes consisted of dry, fissured and cracked lips, itching eyelids and scaling and redness about the face, eyelids and behind the ears. Stomach upsets were also caused by this dye, which is called tetrabromofluorescein. The authors believe that the general use by American women of lipsticks containing this or related dyes may explain many obscure conditions similar to this case.

In discussing how they discovered the cause of these changes, the physicians state: "After avoidance of cosmetics for one week the redness of the face had subsided and the skin behind the ears was now completely clear. Also, to our surprise, the abdominal distress had completely subsided. At this visit she begged to be allowed 'at least the use of lipstick,' since she was unable to go among her friends 'looking like a ghost.' Two days after the resumption of the use of lipstick the eruption at the

(Continued on page xx)

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corner of the eye and the abdominal distress reappeared. Patch tests were then made with all the cosmetics that had been used. All were negative except the one for brom acid in the lipstick (tetrabromofluorescein), which gave a highly positive reaction.

"We know of no reported case of such an eruption due to this dye. The abdominal complaints were especially interesting and may be of importance in explaining other obscure cases of vague abdominal symptoms frequently complained of by women."

HEMORRHAGE IN OBSTRUCTIVE JAUNDICE

Hemorrhage associated with obstructive jaundice can be controlled by the administration of vitamin K and bile salts, J. D. Stewart, M.D., and G. M. Rourke, B.A., Boston, declare in *The Journal of the American Medical Association* for Dec. 16, in reporting results they obtained in thirty-one cases.

Obstructive jaundice, a condition characterized by a yellowish discoloration of the skin, is the result of bile backing up into the blood stream because of an obstruction in the bile ducts. This obstruction may be caused by gallstones, cancer or swelling as a result of inflammation. Entrance of bile into the blood frequently leads to hemorrhage, due to injury to the walls of the smaller blood vessels and also to the effect of bile on the plasma prothrombin, the clotting factor in the blood.

In obstructive jaundice, the authors say, at least two factors tend to decrease the plasma prothrombin. One of these is damage to the liver and the consequent disturbance in its function, and the other is the diminished absorption of vitamin K from the intestinal tract.

Bile salts have been shown to be necessary for the absorption of fat-soluble substances such as vitamin K from the intestinal canal, and in obstructive jaundice the bile may be deficient in bile salts as well as in amount. Another factor of importance in lowering plasma prothrombin is loss of appetite with inadequate intake of foods containing vitamin K. The vitamin K extract that the authors used for their patients was prepared from fresh spinach.

COTTON THREAD FOR STITCHING WOUNDS

Regular cotton thread is a satisfactory material for the suturing or stitching of surgical wounds, William H. Meade, M.D., and Alton Ochsner, M.D., New Orleans, report in *The Journal of the American Medical Association* for Dec. 16.

After sterilizing it by boiling or under steam pressure they used cotton thread in 196 operations. Uncomplicated healing of the wounds occurred in 191 instances.

In discussing the relative value and strength of cotton as compared to other sutures, Drs. Meade and Ochsner state: "When boiled for twenty minutes, cotton thread increases 10 per cent in tensile strength, whereas silk changes but little. When placed in tissue it loses only 10 per cent of its tensile or maximum stretching strength in fourteen days, whereas catgut loses from 50 to 70 per cent and silk 35 per cent.

"Because of its availability and the ease with which it can be sterilized, cotton thread would be a very satisfactory suture in field hospitals in wartime."

A COMPLICATION OF INSULIN TREATMENT

Since the type of glossitis and stomatitis (inflammation of the tongue and mouth) which frequently occurs in diabetic patients receiving insulin treatment is similar to certain types of pellagra, V. P. Sydenstricker, M.D., L. E. Geeslin, M.D., and J. W. Weaver, M.D., Augusta, Ga., say it is probably caused by a vitamin B deficiency.

In *The Journal of the American Medical Association* for Dec. 9 they explain this deficiency as being brought about by the abnormal utilization of carbohydrate in such patients.

"In two of the patients with diabetes," they report, "clinical signs of pellagra developed when the carbohydrate content of the diet and the insulin dosage were increased. In both instances nicotinic acid controlled the inflammation and mental symptoms but when carbohydrate and insulin were again increased the symptoms recurred and were again relieved by nicotinic acid.

"The third patient showed evidence of both nicotinic acid and riboflavin deficiency, these substances being found in the vitamin B complex. With small amounts of insulin, signs of vitamin deficiency disappeared but recurred promptly with increase in the dose of insulin."

COLOR BLIND PERSONS CAN PLAY CARDS

Color blind persons can easily play card games, *The Journal of the American Medical Association* for Dec. 30 points out. "In all card decks," it says, "the suits are distinguished as much by the form of the pips as by the color. Even if the red cards appear as a drab gray, the intensity of the hue is sufficiently different from that of the black cards to permit recognition even if unaided by the shape of the pips."

BRONCHIAL CANCER MIMICS MANY DISEASES

Cancer of bronchial origin "like the devil can appear in any shape or form," that is it mimics many diseases, Edward L. Jenkinson, M.D., and Arthur F. Hunter, M.D., Chicago, stress in *The Journal of the American Medical Association* for Dec. 30.

Because of the danger that such cancer may go unrecognized, the authors urge that the respiratory passages of every patient with obscure chest symptoms be examined by means of the bronchoscope and x-ray.

Some of the disorders or symptoms complained of by the twenty-three patients that the authors diagnosed as having bronchial cancer were: hemorrhage, pain on swallowing, difficult and labored breathing, pain in the chest, productive cough, fever, hoarseness and pain in some remote part (hip, groin or spine) because of spread of the cancer. All of these are symptoms frequently attributed to ailments far removed from cancer. Nine of the twenty-three patients also had a history of a complicating infectious disease.

The mimicking symptoms of these cancers are dependent on the location of the growth which may either displace or create pressure on an internal organ, thus producing the symptoms which are so misleading.

The possible contributing causes of bronchial cancer are chronic inflammatory conditions, the inhalation of irritating substances and a hereditary susceptibility.

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THE NATIONAL HEALTH BILL*

JAMES E. MURRAY

United States Senator from Montana

BUTTE, MONTANA

I am happy to have this opportunity of meeting with the secretaries of the Indiana County Medical Societies, to review for you pending national legislation for health security. It is gratifying that physicians and medical associations are giving close attention to legislative proposals which vitally affect the health services of the American people. Your profession has already made such large contributions to health and medical care that the public expects you to play an important part in the development of public policy for the further advancement of national health. The public and its governmental representatives count on having your constructive assistance.

I know you will join with me in recognizing that a program to strengthen and extend health services for all the people has not only technical aspects but also broad public implications. Health is as vitally important to economic and social security as it is to life, liberty and the pursuit of happiness. The health of the individual is an essential component in his welfare and in the well-being of the family, the community and the nation. The health of our people is, therefore, quite properly a fundamental interest of the statesman as it is of the physician.

Health cannot be viewed apart from other major characteristics of life and living. Health services must be seen in proper perspective, with due regard for the level of professional and technical skill and in due relationship to economic and social resources. Health is so precious and so important that its preservation and its protection deserve all the effort which the public and the professions can contribute. It is sound that not only the individual and the family but also society as a whole should make strong efforts and give generous financial support to health services.

The National Health Bill (S. 1620) now before the United States Senate is a comprehensive proposal to establish a health program for the Nation. A wealth of evidence shows that the program which this bill proposes to establish could contribute greatly to the health and welfare of the entire population. It is, therefore, one of the most important subjects under consideration by the Congress.

This Bill was introduced on February 28, 1939, by my distinguished colleague, Senator Robert F. Wagner, of New York, who has long been associated with liberal and progressive programs. Behind this bill, its objectives and its provisions, there is a long history of investigations and conferences. Many of you are acquainted with much of this background. I need only remind you of some of the most recent events.

The Committee on Economic Security, appointed by President Roosevelt in 1934, developed the outlines of a health program as part of a general plan for economic and social security. Some parts of that health program were adopted in 1935; they are embodied in the Social Security Act as titles V and VI, providing Federal grants to States for maternal and child welfare and for public health work. Other parts of that program—dealing with medical care, the construction of needed hospitals and other health facilities, and compensation of disabled workers—were reserved for further study. The developments made possible during the past four years by the programs of titles V and VI of the Social Security Act are written large in the record of public health advances, the reduction of maternal morbidity and mortality, and the provisions for the care of crippled children in the States and localities as well as in the Nation as a whole.

The President's Interdepartmental Committee to Coordinate Health and Welfare Activities resumed the health studies of the Federal Government, and

* An address delivered before the Annual County Secretaries' Conference held in Indianapolis, January 21, 1940.

in 1938 made public the National Health Program which had been developed by its Technical sub-Committee on Medical Care. As many of you know, this report was very favorably received at the National Health Conference in July, 1938, where it was considered by a large and representative public gathering which included representatives from the medical, dental, hospital, nursing and other interested professions. Subsequently, the program was explored in considerable detail with lay and professional groups, and it was transmitted to the Congress by the President with his Message of January 23, 1939, accompanied by a report of the Interdepartmental Committee.

Senator Wagner's bill was introduced shortly thereafter. It was referred to the Committee on Education and Labor which created a special subcommittee, of which I am chairman, to handle this bill. The subcommittee conducted public hearings between April and July, 1939, in the course of which it accumulated an exhaustive record of evidence concerning the need for the National Health Program, and the opinions of many respresentatives from various groups, both lay and professional, concerning the bill.

I will not undertake to review at this time the existing conditions which have led many lay and professional leaders of the country to propose a new health program for the Nation. These have been in sufficient detail in the reports of the Technical Committee and of the Interdepartmental Committee; they are embodied at great length in the published Hearings and are summarized in the Preliminary Report which I made to the Senate on August 4, 1939, on behalf of the Committee on Education and Labor.

A large mass of evidence which has been presented before our committee shows convincingly that there are great opportunities to improve health conditions in this country, to reduce the toll of pain and suffering, to lessen disease and premature death, and to greatly diminish the public and private burdens created by preventable sickness and disability. These opportunities exist notwithstanding the fact that health conditions have been steadily improving.

Our general death rate has been declining; the deaths from tuberculosis, diphtheria, and certain other diseases have been greatly reduced; infant mortality has been cut to nearly half of what it was about 25 years ago; and other great accomplishments have been achieved.

While all this, and more, redounds to the credit of public and private efforts which have been made to improve the Nation's health, and while great praise is due all groups, especially to physicians, for the prominent part they have played in this national progress, urgent needs still exist and large opportunities are still ahead.

It is necessary to consider not only present achievements, but what remains to be done—what it is possible to do with the resources at our command. It is well known that the prevalence of disease and the length of life are related to economic status. Because of this country's favorable economic situation and high average standard of living, it is to be expected that our sickness and death rates should compare very favorably with those of other countries. Death rates were as low last year as ever before, but this is no reason for failing to strive for further improvement since the same statement could have been made concerning the rates of 5, 10, or 30 years ago. Neither you nor we should or intend to rest on our oars. However good our accomplishments compared with those of other countries or those of our own past, it is nevertheless true that the conditions of health in this country could be and should be very much better than they are.

We are convinced, from the testimony presented before us, that if existing medical knowledge and skills were adequately marshaled and put to work, the prevalence of disease and disability could be greatly lessened, tens of thousands of deaths annually could be prevented, the average expectation of life could be appreciably increased, and our people could be rendered healthier, happier, and more productive. Progress will continue, but it is our responsibility and our opportunity to apply all available resources to accelerate and to guide such progress soundly in our time. There is no basic reason why the knowledge and skill now available should not be applied for the benefit of the people, adult and children, now living.

The opportunities for improvement in health conditions become evident when we look beneath the surface of national death and sickness rates and consider the rates for particular localities or groups in our population. Then it becomes apparent that average rates, which may be highly encouraging, obscure rates for particular communities, population groups, or diseases which are disgracefully high. We then find how much less we are doing than we know how to do; how much suffering, disability and premature death persists which could be prevented by known and applicable methods; how much more could be accomplished if we could bring together, more effectively than is now the case for tens of millions of our people, the physician and the hospital prepared to furnish service and the patient in need of service.

The purpose and objective of the national health bill is to aid the States in improving health conditions and services in the United States and in establishing systems of insurance against wage loss from temporary disability. This bill does not propose a new departure or a new type of activity for the Federal Government. The bill proposes only to lay out a long-range and systematic program as a basis for carrying on old and traditional activities in a sound and efficient manner.

A national health program is not merely an emergency program—any more than the health problems of today are emergency problems. On the

contrary, a sound program must deal with a problem of large magnitude which will be solved only by years of sustained effort. The accumulated neglects of many years must be overcome and careful plans must be laid to wage a ceaseless and unremitting war against disease.

We are spending about three and a quarter billion dollars or more each year for health services and medical care. Our workers probably lose over a billion dollars or more each year in wages that are unearned because of disability. Premature death of wage earners brings losses in our human capital which have been authoritatively estimated as amounting to over five billion dollars a year. Altogether, sickness and disability lay upon the national economy a toll, in costs and losses, of something like ten billion dollars a year. As a result of these costs and losses, there is a staggering public burden for dependency and relief. Every State carries large financial burdens for the home relief of families made dependent by illness of the breadwinner. Much of this is preventable; and much of that which is not now preventable can be greatly reduced in severity.

The public hearings on S. 1620 held by our committee provided an opportunity for us to be furnished a large volume of information and to hear the opinions of authoritative groups and individuals interested in health services and in the public welfare. The committee could not fail to be greatly impressed by the large number of highly responsible organizations and agencies, lay and professional, whose representatives testified in support of the bill and urged action by the Federal Government.

The public hearings have shown that there is broad and substantial support now for Federal legislation to strengthen, extend, and improve the health services of our people. Scarcely a witness raised objection against the objectives of the bill, although representatives of some organizations, and especially of the American Medical Association, presented serious criticisms.

The health bill proposes to implement the national health program by building upon the framework of health services constructed under the Social Security Act. To that end, it amends several titles of the Act, to enlarge and broaden their scope, and adds three new titles. There would then result the outlines of a general program, with five principal elements:

(1) Maternal, infant, and child health and welfare services;
(2) general public health services;
(3) construction of needed hospitals and related facilities;
(4) general medical care; and
(5) compensation for disability wage loss.

S. 1620 offers the basis for a balanced, long-range program. In its general pattern, S. 1620 undertakes to develop the National Health Program primarily through the method of Federal grants-in-aid to the States. Thus, it follows closely the basic pattern of the Social Security Act. This pattern tends to give great latitude to the States in the development of their own plans. The last four years' experience under the Act shows that such a pattern is flexible and adjustable to the different needs which exist in the States, though it has some weaknesses evident in the diversity and in the inadequacies of some State plans and in the inability of the poorer States to meet the uniform matching of funds at present required under the Social Security Act alike from the poor States and the rich States.

There is only one part of the present Social Security Act which is wholly Federal: that is the system of old-age and survivors insurance. I pointed out in our Preliminary Report to the Senate that this has a direct bearing upon the health bill in connection with the proposals for disability insurance. The health bill proposed Federal grants-in-aid to the States which develop systems of temporary disability insurance. The bill did not deal directly with insurance against permanent disability, because it was intended that insurance for those who are permanently disabled should be part of the Federal old-age and survivors insurance. An independent amendment to this effect was introduced in connection with other amendments to old-age and survivors insurance, but permanent disability insurance benefits were not adopted at the last session of Congress. Accordingly, I reported that when our subcommittee resumed the study of the health bill it would have to consider whether permanent disability insurance should be taken under consideration at the same time when we study temporary disability insurance. The social and economic protection of those who become permanently disabled early in life is as clearly important and necessary as is the protection of those who leave gainful employment on account of old age; disability insurance is a logical line of development for our expanding program of social security.

In the Preliminary Report to the Senate, I pointed out that the bill S. 1620 has received wide support from large and representative organizations. Its objectives are noncontroversial. However, the importance and complexity of the program requires that it shall be worked out with great care. Our committee had not had adequate time to make an exhaustive study of all of the problems involved in this proposed legislation. It therefore promised to continue its study of the bill so that a definite report could be submitted soon after the beginning of the next session—that is, the present session—of Congress.

In order to expedite further study of the bill, I submitted in that report a carefully prepared summary of the bill itself and of twelve of the most important problems raised in the hearings, these being questions on which differences of opinion had developed or topics which required special further study. These special problems raise questions of

different kinds. In some instances, we are confronted with highly technical subjects in which we must be guided by experts of one type or another. This is inevitable in a program which is designed to deal in a comprehensive way with different kinds of needs in highly diverse communities. In other instances, we are dealing with misunderstandings rather than with real problems. In most instances, it is already indicated that these questions can be resolved by comparatively simple amendments to the bill, especially if we have the constructive advice and cooperation of competent and interested groups.

In bringing you up-to-date on the legislative position of S. 1620, I must refer not only to the problems and issues which I summarized in August but also to some more recent developments.

We have, for example, reviewed the recommendations recently published by the American Youth Commission of the American Council of Education, calling attention to the special health needs of the youth of the Nation. It is gratifying to find that these recommendations are amply anticipated and met by the provisions of the bill.

Two of the great labor organizations of this country, namely, the American Federation of Labor and the Congress of Industrial Organizations, recently enacted resolutions at their annual conventions in which they emphasize their preference for national rather than State social insurance systems to protect wage-earners against the costs of medical care and against loss of earnings because of disability. There is obviously much to be said in support of their recommendations, and these must be given very careful consideration. We recognize that the development of the social insurance parts of the health program on a Federal basis presents some complex and knotty administrative questions which require further study by the technical experts as well as by members of Congress.

Many welfare administrators in the States and localities, as well as other persons, have repeatedly called attention to the health and medical problems of needy people. In many places, the deficiencies of medical care and of funds to pay for medical care are quite acute for people who are already being assisted for their food, shelter and clothing through funds provided under the Social Security Act or through the general relief programs of States and localities. Many other people who are just on the borderline of being needy but require considerable medical care are not being assisted because public funds are too limited; they go without care or obtain only insufficient care or are a financial burden on practitioners and hospitals. A serious question has been raised whether the Federal Government should make special provision to help the States in providing medical care for these needy persons through the health bill, or whether this problem should be met by amendment of the public assistance titles of the Social Security Act.

Medical assistance for needy persons would meet an obvious objective. It cannot, however, be considered as a substitute for a program to meet the medical needs of many millions of otherwise self-supporting people. We have had ample testimony showing that wage earners, farmers, agricultural workers, and people who run their own small businesses do not wish to obtain the medical care they need on a charity or on a relief basis. Millions of these people who are self-supporting for all other necessities of life find themselves unable to pay their way when they are faced with serious illness or expensive medical or hospital care. These people who do not have to take a "means test" for anything else do not want to take a "means test" for health service. Medical assistance is no sound answer to their problem. Nor do they wish to receive free care from physicians or hospitals, however generously and willingly such medical charity is available or given. A sound plan would make medical care available to them on a basis which they can accept as self-respecting.

There are various groups of people who have expressed dissatisfaction with the general medical care program embodied in title XIII of the health bill. Even some of those who believe that medical care insurance should be developed on a State basis would prefer to see this title divided so that some parts would deal with medical assistance for needy people and other parts would provide specifically for medical care insuranec programs, with appropriate standards and safeguards explicitly stated in the bill. If the medical care programs for self-supporting people should be developed on a national basis, it is possible that the Federal-State program of title XIII should be restricted to the needy.

Many of you know that the health bill received endorsement from many important organizations, representing citizens in all walks of life. These endorsements included not only labor, consumer, civic, welfare, public health and other groups, but also many professional groups which expressed their support of those parts of the bill which deal with activities in their special fields. The American Medical Association and some other professional associations endorsed the general objectives of the bill, but expressed various reservations and criticisms as to the specific proposals or the details.

Recently, the American Medical Association published an eight-point platform which has a direct bearing upon the problems before our committee considering the health bill. The Association advocates the establishment of a unified Federal agency coordinating and administering all medical and health functions of the Federal Government, exclusive of those of the Army and the Navy; the allotment of Federal funds on proof of need; local responsibility, local determination of needs, and local control of administration in health and medical services for the sick, for the prevention of disease and for the care of the indigent and the medically indigent; full utilization of qualified existing facilities; the continued development of the private practice of medicine, subject to such changes as may be necessary to maintain the quality and in-

crease the availability of medical services; and the expansion of public health and medical services consistent with the American system of democracy.

It is gratifying that the broad principles and objectives expressed in this platform are in general agreement with the principles on which the health bill was drafted. Nor is this surprising; when the bill was being prepared the American Medical Association had already stated in considerable detail —in the resolutions adopted by its House of Delegates in September, 1938—its views on the proposals previously developed by the Technical Committee on Medical Care. The only point at which the bill is clearly not in accord with the eight-point platform of the Association is on their first point, the establishment of a unified Federal agency embracing all medical and health functions of the Government except those of the Army and the Navy. This plank in the platform is obviously a counsel of perfection which must be tempered by practical and realistic considerations. To carry out this proposal, numerous and complex activities would have to be dislocated wholesale from other agencies of government with which they are now functionally coordinated. This would be greatly to the disadvantage of their efficiency. Various agencies which carry on health activities also have other closely related functions. Wholesale integration on a health basis would create as many new needs for coordination as it met by such drastic reorganization. This is not to say, however, that the health bill cannot be improved by providing health-coordinating provisions. Indeed, Senator Wagner himself pointed that out to our committee at our first public hearing, indicating that the problem had not been tackled in the bill because at that time the President's reorganization plan was already pending before Congress. Otherwise I can see no basic disagreement between the platform of the American Medical Association and the objectives or the provisions of the bill. There may be some minor differences of detail, but it should not be difficult to iron these out. In saying this I assume that no one intends to drive too far the emphasis on *local* planning, administration and control which is notable in the platform of the American Medical Association. We all know that complete or excessive reliance on local resources, especially on local financial resources, means in effect that nothing can or will be done for precisely those areas where health is poorest, where hospital, clinic and diagnostic facilities are least, and where the physicians are most powerless to give more than very limited help in meeting health needs. I look forward to cooperative exploration of all such problems with the medical profession.

Whether all parts of the program can be worked out satisfactorily in the next few months, whether the program should be enacted as a whole, or whether some of its parts should be given preference over others at this time will receive careful consideration by our committee.

A few weeks ago, the President himself suggested a special program, concentrating on a particular phase of the health proposals. He especially emphasized the construction of hospitals and health centers in communities where the need for such facilities is greatest. It is reported that this plan contemplates construction of hospitals by the Federal Government, wholly at its expense and making use of W.P.A. labor, where the need exists and where the locality is willing and able to maintain and operate the institution after it is built. I understand that the details of this plan have yet to be worked out and that it is being carefully studied by the Interdepartmental Committee. It is therefore premature to hazard opinions about its merits in the form in which it will be finally worked out. Our committee will carefully study any plan which may develop from the President's suggestion.

The President's suggestion for a hospital construction program is, I understand, intended to surely make at least a small beginning on the national health program now. It obviously is not—nor is it intended by the President to be—a substitute for the broad, long-range program outlined in the health bill.

I may remind you that the health bill emphasized from the beginning the need for constructing hospitals in certain areas. It also provided for small temporary grants, disappearing after three years, to assist the communities in taking over financial responsibility for operation and maintenance, and it provided for grants-in-aid to help the States and localities to enable people to make more effective use of hospitals as well as of the services of physicians and others. Grants-in-aid for hospital construction are proposed in the bill on a "variable grant" basis, the Federal grants ranging from 33⅓ percent for the wealthiest State to 66⅔ percent for the poorest State. It was intended that this formula should enable even the poorest State to participate substantially in the program. If this formula still gives too much to the wealthy States and too little to the poor States, there might be justification for spreading the range of "variable grants" still further. Under the public health title of the present Social Security Act, no matching of funds is required from the States.

Thus, while there are both old and new questions still confronting us, we can happily report that much progress has been made in the development of health and disability legislation.

It is now widely recognized that many fears which were expressed when the bill was first introduced are largely groundless. Some who at first thought that the bill proposes to bring about revolutionary or dangerous changes in medical care have found, as they have taken the time and trouble to study the bill themselves, instead of relying on second-hand analysis, that these fears are largely unwarranted. Everyone is agreed on the obejctives to make health services available to all our people; everyone wants these services maintained at and raised to the highest practical level; everyone wants sound relationships between doctor and patient;

everyone wants to protect the integrity of health services; and everyone wants the worker protected against disability which brings loss of earnings and threatens security. I am confident that these objectives are attainable without sacrifice of any high standards of sound public policy, medical practice or health service.

It is clear that the bill as first introduced needs amendment to clarify its provisions and to include all necessary safeguards to protect the public interest in high quality of health services and medical care. I have myself pointed out many such needed amendments in the report I made last August to the Senate on behalf of the Committee on Education and Labor. I said then, and I repeat now, that we welcome all constructive suggestions, especially from physicians and medical associations.

As we go forward with the task of perfecting the health bill, we must keep constantly in mind that existing health needs and existing inadequacies in health services are large and that the public considers them of sufficient importance to warrant public action. There is, of course, room for differences of opinion how these needs and inadequacies should be met. But, I repeat what I have said before, I have not yet seen any substantial evidence that these differences cannot be resolved along sound lines.

We are all aware that any sound program to advance national, local or individual health will be effective only if it provides a sound basis for the loyal and cooperative work of the qualified professional workers. The program must therefore meet high professional standards and contribute to the steady progress of professional service. This is a common objective of the public and the professions. If there are differences as to method, procedure or detail, these should be—as I am confident they can be—worked out calmly and carefully. No good cause is served by loose talk and irresponsible charges about political control or bureaucracy. I mention this because within the week I was amazed to find a national physicians' committee charging in one of its publications that the National Health Program and the health bill are moves toward the establishment of political control of medicine. Our common and joint interest in the public health and the public welfare gives us a worthy opportunity for cooperative effort. In such an undertaking there is, in my opinion, no place for such irresponsible charges. I am sure that our committee will have the careful, critical and constructive advice from physicians which the undertaking deserves.

As we continue our work on the bill in the Senate, we shall welcome further suggestions as to specific amendments which may safeguard the objectives of the bill and make its provisions surely practical. Medical science has reached a high state in this country. The bill should contain provisions which will encourage the further evolutionary development of medical science, teaching and practice. It should contemplate proposals which will work toward the goal of making modern health services —preventive, diagnostic and curative—available to all people in all walks of life. It should aid and encourage health safety in industry. Its provisions should be equally significant for the people living on farms and in villages as for those who live in the cities. It should not only maintain but encourage the partnership of effort between the Federal Government, the States, localities, and the professions in the continuous improvement of health and the advancement of security. I invite your cooperation in our deliberations.

ABSTRACT: COUNCIL OF PHARMACY AND CHEMISTRY HAS BEEN SERVING PUBLIC 35 YEARS

The importance of the Council on Pharmacy and Chemistry of the American Medical Association in furnishing expert medical opinion in connection with the carrying out of the new Food, Drug and Cosmetic Act is emphasized by an editorial in *The Journal* of the Association for Feb. 10 which summarizes the Council's accomplishments on the completion of its thirty-fifth year.

While it might be supposed that with the enactment of the new law there would remain little need for the Council's work, the editorial points out that the importance of this act is mainly in the field of drugs sold for self medication and that Congress did not give the Food and Drug Administration power to determine whether or not a drug is a worth while addition to the medical equipment.

Describing the work of the Council, the editorial says that its first task was to expose the most extraordinary of the deceptions practiced on the medical profession. Then came the more serious task of passing on proprietary drugs detailed to the medical profession. Valuable products were listed in New and Nonofficial Remedies, which was originally a column of *The Journal* and was later expanded into a book to which periodic additions were made as the Council's scope widened. Products are admitted according to a set of rules published for the information of physicians and manufacturers. "Remuneration in any form is never accepted for the consideration of submitted preparations," the editorial states.

While the rules now governing the acceptance or rejection of remedies are practically the same as those adopted in 1905, the editorial says, "an additional rule was adopted about fifteen years ago to the effect that concerns whose policies were contrary to scientific medicine and inimical to the best interests of the public and the medical profession would not be recognized by the Council.

"Advertising claims employed by manufacturers of drugs for products accepted by the Council have, in the main, attained standards of accurateness and truthfulness not found in any other field of marketing or in the entire medical world outside the United States. More and more physicians ask detail men whether or not their proprietary products have been accepted by the Council and if not, why not.

"Those firms which have been following the leadership of the Council have already found that it is much easier to comply with the new Food, Drug and Cosmetic Act and the Wheeler-Lea Act in the case of their accepted medicaments than have some firms which have tried to ignore the Council by extolling nonaccepted preparations."

HOSPITAL INSURANCE AND MEDICAL INDEMNITY*

PETER IRVING, M.D.
NEW YORK CITY

Much the best way to look at hospital insurance and medical expense insurance is to bring into the picture, at the same time, medical relief. By that term "medical relief" I mean medical care of the indigent and near indigent. All three schemes have many factors in common. Together, moreover, they constitute, in my opinion, the essence of the answer of the medical profession of America to the challenge that has been thrown at us from many sources —from government, from politicians, socializers, paternalizers, welfare theorists, educationalists, and last, but by far the most important, those self-reliant people in financial stress whose call for our help is the more powerful and appealing because it remains unspoken. The reply to the challenge is a real national health program which has been most aptly named by Dr. Nathan B. Van Etten as "The American Way."

Just the other day I heard at a "Town Hall Meeting of the Air" in New York City three different approaches toward the establishment of a permanent national health program. Compulsory health insurance was favored by Dr. Henry E. Sigerist of the Johns Hopkins University; our own non-political program by Dr. Terry M. Townsend, President of the New York State Medical Society; and, a compromise using compulsory health insurance, voluntary insurance, and pure state medicine by Dr. C. E. A. Winslow of Yale. The expression of those points of view was not new, but they were dramatized, and immediately there came into my mind the idea that, if our answer is properly developed, and carefully put into operation, many suggestions of which we do not approve will soon lose what lure they seem to have for some.

All the more reason, then, that we who are sitting in secretarial seats shall know fully how to organize our plans, know each and every detail of proper operation, and—what is of immediate importance—how best to get these things going. Furthermore, we all need to be prepared to explain all the factors clearly to the public.

To me these three systems are like three siblings in the American Family. Tax paid medical relief is the oldest child. Because of unwise parental guidance it has fallen into naughty ways, but it can, I am sure, be straightened out, until its parents are finally proud of it. The later two children, hospital insurance and medical indemnity, seem almost like twins, so short was the time between their births. I look for a number of behavior problems to crop up for these lads.

All these systems have the job of preservation of the undeniably real merits of the private practice of medicine. In medical relief for the indigent and near indigent, the old-fashioned system of the town doctor, and even the pure charity type of care can be made readily to give place to the newer method which keeps for poor people their own doctors and payment for these services by the communities on a basis which is fair and square to all.

I am speaking of this matter first because it is very prominent at present in our minds in New York State. Please understand that I am of necessity talking from the angle of my own State because it has not been my privilege to have been over the country as has our medical economist, Dr. Leland, seeing many "plans."

We in New York are not having an easy time to persuade our state and local governments that there is an easier way—a better way—to handle what we like to call medical relief. Professional committees advisory to the local welfare officers can be nominated by county medical societies to iron out the many difficulties that arise in the course of this way of providing medical care. In our State, an equitable fee schedule was drawn up in conference with the State Department of Social Welfare last spring. Procedures to minimize red tape were devised; but, for reasons that are not clear, the governmental welfare people seem loath to go ahead. Apparently, the buck is being passed back and forth between the State Department and the local welfare officers. It may be necessary for us to appeal to His Excellency, the Governor, who fortunately is deeply interested in public health, and may be depended upon to give the matter his serious attention if it is presented to him.

HOSPITAL INSURANCE

It was necessary in New York to amend the insurance laws to allow for the non-profit type of insurance for hospital care. This was done in 1934, and the first incorporation took place in 1935. Our State Medical Society had already drawn up certain principles which it thought could best guide the operation of these companies.

It was not long, however, before it became apparent that there had been some lack of foresight particularly with regard to the definition of hospital care as compared with medical care. The insurance certificate expressedly stated that it covered hospital care only, and that physicians' fees were a matter between themselves and the patient, but there were a number of auxiliary services which grew to be bones of contention.

For instance, the largest of the nine corporations serving different areas of the State—a corporation that now has 1,400,000 clients—gave in addition to bed, board, general nursing care, use of delivery room, also *anesthesia* when given by a salaried

* Presented before the annual Secretaries' Conference of the Indiana State Medical Association in Indianapolis, January 21, 1940.

hospital employee, and "ordinary" *laboratory or x-ray* examinations. The term "ordinary" was finally held to mean those tests necessary to establish a diagnosis.

The roentgenologists and pathologists—salaried men—protested vigorously on the ground that pathology and radiology imply the practice of medicine. The State Society two years ago asked the hospital insurance companies and the hospitals to accept a re-definition couched in these words:

a. "*Hospital care* shall mean: provision of bed, board, general nurse service, customary surgical dressings and medicines, and other facilities of the institution not including medical care as defined in (b)."

b. "*Medical care* shall mean: any procedure or service by a licensed physician acting under authority of Section 1250 of Article 48 of the Education Law of the State of New York." (i. e. the Medical Practice Act.)

The response from the large corporations and the hospitals was quite unsatisfactory to us and we became aware that the medical profession had so small a representation on the Board of Directors of that company that it could not hold its own with the men drawn from the business and insurance worlds, and from the hospitals. Therefore, we strongly urged the corporation to recast its management.

Nothing happened until just a short time ago when that particular company, Associated Hospital Service of New York, Inc., found that its financial experience threatened a fold-up. Since then the seventeen county medical societies in the area concerned have been listened to more attentively. Gradually a principle has been worked out of having one-third of the Board of Directors medical men, one-third hospital administrators, and one-third business men representing the public. The provisions of the certificate of that company have been very materially improved from our point of view, although they can undoubtedly be made better.

Parenthetically, it is only fair to say that it is not simple to decide what part of x-ray work is really hospital care and what part is truly medical care. It looks to me as if this particular problem will not be decided for quite a long time.

In passing, it is interesting to note some of the reasons why this company had financial difficulties. In the first place, its clientele had been built up with an amazing rapidity within the first two years so that its bank account looked very prosperous. Then, the length of hospital stays began to increase quite rapidly, and the number of those admitted to hospitals multiplied fast. Its funds were drained at an accelerated pace until things looked very badly for the future. Study of the situation showed that many people were going in purely for diagnostic purposes, a thing not provided for in the certificate, as well as people who knew there were things wrong when they applied for policies, people who might be called "chiselers," and many of them were individual clients—not those in groups. At first, subscribers had been taken only in groups, but later the company felt so flush that it sought individual applications.

Then, too, the company had increased the rate paid to the hospitals and the number of days of allowable stay was increased from twenty-one to thirty. This last was taken advantage of quite heavily. For instance, the average obstetrical hospital stay for people who pay their own way is ten days, and the obstetrical cases of the policyholders averaged fourteen days. These troubles were straightened out and in the course of a few months the company's financial status became entirely sound and satisfactory.

In this connection I feel compelled to say that in the future hospital insurance companies as well as medical indemnity insurance companies will find it necessary in some way to do as the commercial insurance companies have learned is best—have some form of preliminary examination in order to rule out the common operable defects that people carry for years, such as hernia, tonsils, fibroids, etc. The New York company found some time last year that its experience showed tonsillectomies done as 13 per cent; appendectomies 15 per cent; hernia about 4 per cent; and hysterectomies, presumably largely for fibroids, 4 per cent or a little less. Undoubtedly many of these clients knew they had such defects when they joined up.

On the other side of the picture it is encouraging to see how small an administrative force is needed to carry on the company's day by day work. Roughly, 800 full and part time paid employees for 1,400,000 clients gives a ratio of 1,750 clients per employee. These figures are approximate and may have been changed since I heard them, but a comparison is in order with the English panel system of one to each one hundred.

GROUPS VS. INDIVIDUALS

The primary reason for soliciting groups of employees rather than individuals, of course, was the ease of collection of monthly premiums, often with the aid of the employer, as contrasted with the cost of individual collecting. This will be as equally true of medical expense insurance as it is of hospital insurance.

MEDICAL INDEMNITY

Medical expense insurance, which I have called a near-twin brother of hospital insurance, probably will be a bit more troublesome child, though its parents have had enough experience now to avoid in the beginning some of the mistakes that were made with the hospital boy. In New York State three organizations have now been approved by the State Department of Social Welfare and the State Department of Insurance, and will be shortly in operation—one in the western, one in the center, and one in the southeastern portion of the

State. The medical share of management, with County Society aid, will from the start be such as to make for future success. Even before these three were incorporated, indeed before a further enabling act passed our legislature, a problem of no small import was solved. The suggestion had been made that the existing hospital insurance companies take on medical indemnity as well. Our State Society opposed this as an unwise financial risk. Something approaching an actuarial basis existed for hospital insurance while the other is unpredictable. Bad experience with medical indemnity might sink the hospital insurance. Moreover, we thought that danger loomed of a corporation being eventually tempted to buy and sell medical service. Be that as it may, the law in New York specifically forbids structural combination, though it permits the two corporations to do certain work for each other that saves duplication of effort and holds down administrative costs.

On the other side of the picture are a number of questions that will have to be answered only by trial and error. Where should the upper level of income be set so that the number of people who are abundantly able to pay full regular medical fees shall not be included? If these people are included, there is danger that they will eventually consider the fee schedules set as also setting the rates in ordinary private practice.

How limit the number of medical indemnity companies that may operate in a given population? In general, the larger the clientele the more even the out-go over the years. The smaller the group, the greater the danger of sudden, explosive financial failure. These facts might perhaps be cited in favor of a state-wide plan rather than regional. On the other hand, in New York it is the belief of all of us that much emphasis should be placed on local regions. To that end the law limits any one company to not more than twenty counties. When the question of how many such companies should be licensed for a given area came up at a hearing before the Insurance Department, there was one individual who declaimed against "monopoly" even though the profit motive is not in operation.

Our three New York organizations are using somewhat different criteria for judging eligibility of clients. For instance, one confines its operations to those with annual income not exceeding $1,200 for a single person; another provides that full indemnity go to those receiving $1,500 a year with no restriction above that level. The reasoning in the latter case is that this is merely cash indemnity as bought for a certain premium and gives the patient just that much help toward his total bill.

Below these levels all three group their clients according to descending income levels, charging lower premiums, and using the unit system to guard against loss—"insuring the insurance" as has been said.

I shrewdly suspect that the scrutiny of medical indemnity bills from the doctors will have to be closer and more careful than in the case of hospital insurance. Hospital records are automatically a help there; but the need for home visits and office visits will be variously interpreted by different physicians. However, it should be possible for disinterested medical committees of the companies to take care of these problems in much the same way as do the Professional Committees Advisory to Welfare Officers in the case of medical relief. And there is where county medical societies can well come in.

You have noted that I have not gone into many details of interest that deserve study. In part that is because the subject is a long one, but chiefly because I wanted to leave in your minds two main points.

First, I would like to stress and stress again the value of keeping medical relief, hospital insurance, and medical indemnity together in your minds as a three part national health program better than any of the others suggested. One great reason that it is better is the retention of continuity of medical service for those who may change their economic levels and on account of unemployment go down into the relief field or, getting jobs, rise to the insurance region. There is no reason why, if these three systems are properly managed, a given individual cannot keep his own doctor or doctors throughout his or her life. And—is not that one form a genuine form of security?

Next, I must tell you that I have used a simile, in describing these systems as children with behavior problems, for a definite purpose. I wanted to lead up to a reminder that our child study and child guidance experiences have shown us that behavior problems are mostly attributable to parental—not faults—but mistakes in raising their progeny. That being so, is it not our duty, as parents, the public and ourselves, to try to figure out where we erred and to readjust with care? If we do this well, I am convinced that eventually we shall be very proud of these, our health children.

POSTGRADUATE

COURSE IN PEDIATRICS

For the General Practitioner

I. U. SCHOOL of MEDICINE

SEE PAGE XXIV

POST-GRADUATE MEDICAL EDUCATION IN OKLAHOMA*

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The quality of medical service a physician renders to his community depends, to a great extent, upon his knowledge of the newer and accepted methods of diagnosis, treatment, and prevention of disease. This knowledge can only be obtained by his more or less constantly familiarizing himself with current medical literature and by post-graduate study. It is a fact that many continue to follow the methods learned in school years ago and that they manifest little interest in the more recent advancements in their profession.

Some one has said that the present function of a medical school is not only to train students for the practice of medicine but to keep them trained after they have received their degrees. As medical science progresses with cinematographic rapidity, it becomes increasingly difficult for physicians in private practice to keep pace with it. Because of financial or other circumstances related to their practice, few are able to leave it to take advantage of instruction offered in the larger centers of learning. The smaller the community and the greater its distance from teaching centers, the more isolated the physician becomes and the more urgent the need that post-graduate instruction be made available to him. Appreciating that this condition existed in rural Oklahoma to some extent, it was decided that this type of instruction should be taken directly into his own community.

With this thought in mind, the first program began in 1925, under the direction of the Extension Division of the University of Oklahoma. The dean of the medical school was appointed chairman of a committee to act in an advisory capacity. The course was organized under a circuit plan, and while it was rather an experiment, it was so successful that the instructor was engaged for another year to give other circuits in pediatrics, and over a thousand physicians took advantage of the course. During the next four years other courses followed in internal medicine, obstetrics, surgery, tuberculosis, urology, otolaryngology, and surgical anatomy—the latter at the Medical School in Oklahoma City, where cadaver dissection was possible.

In 1929, the post-graduate program exceeded the budget set up for it by the University, and the State Medical Association then began rendering financial assistance and took a more active part in the administration of the program. This continued until 1933, when political interference of the Governor terminated the University's participation. The State Medical Association then took over complete sponsorship. Up to that time, the physicians of Oklahoma had contributed $91,325 in fees to these programs.

The administration of the program by the Association resulted in larger enrollments in the courses, due to the interest of the members in an activity of their own creation, and to the practical nature of the programs offered. This included free and private consultations with the instructor, and a series of lay lectures which has resulted in a better informed citizenship and its cooperation with the medical profession of the state.

ADMINISTRATION OF POST-GRADUATE PROGRAMS

A Committee on Post-Graduate Medical Education, consisting of three members appointed by the President of the State Medical Association, is responsible for the administration of the post-graduate program. This group appoints an advisory committee of six members, including the State Commissioner of Health and the Dean of the School of Medicine. The committee is empowered to assemble funds, outline and supervise the program, and employ the personnel necessary to conduct the course. It also makes an annual report to the association at the state meeting, as well as quarterly reports to the financial contributors.

In 1937, the committee decided to conduct a two-year program in obstetrics. An appropriation of $4,000 was requested from and granted by the State Medical Association for this work. This was supplemented by a generous contribution from the Commonwealth Fund of New York, as well as financial assistance from the Oklahoma State Health Department, using funds from the United States Children's Bureau. The total budget was estimated at $19,500 per annum to provide for the salary and traveling expenses of the clinical instructor, field director, and a full-time office secretary, in addition to miscellaneous expenses for supplies and equipment. The account is banked as the Post-Graduate Fund and is disbursed by the committee chairman. A surplus of $5,500 remained at the termination of the course, which was prorated back to the contributing agencies.

The post-graduate course in obstetrics was so arranged that ten scientific lectures, clinics and demonstrations were given, one each week for ten consecutive weeks, to the enrolled physicians in either the county seat towns or in the communities where the regular county medical meetings were held. It is obvious that by holding the instruction period for the physicians in the evening the instructor may devote the entire day to consultations and lay lectures. Such an intensive program necessitates a full-time instructor and field director.

In Oklahoma it was deemed advisable to divide the state into eight teaching circuits or districts

* Presented before the Secretaries' Conference in Indianapolis, January 21, 1940.

† Chairman, Committee on Postgraduate Education, Oklahoma State Medical Association.

with each circuit having five cities selected as teaching centers. The registrants in each center selected a clinic chairman who arranged clinics and consultations for the instructor, when the latter were requested.

Experience has taught the committee that the payment of a small registration fee, which in this instance was five dollars, is advantageous in stimulating a more regular attendance. A minimum of fifteen physicians must register for the course before a center can be definitely established. The policy of the committee was to allow nurses employed by local enrolled physicians, superintendents of hospital obstetrical wards, and full-time county health unit nurses to attend the course, but no registration fee was charged this group.

A manual containing the printed lectures of the instructor was presented to each doctor at the close of the course, at the cost of one dollar. This gives the physician a permanent record of all the charts and tables used by the lecturer, theory applied to practice and the therapy recommended and discussed by him during the course. These manuals will become the handbook in obstetrics for many of our physicians for the next several years.

In applying for positions to the Public Health Service or other agencies of federal, state, and municipal governments, and some corporations, applicants are frequently requested to present credentials of post-graduate study. Because of this, a record of attendance is kept by the instructor, and certificates of attendance are issued to those physicians who attend seven or more of the lecture sessions. This certificate is signed by the instructor and the committee chairman.

STATISTICAL SUMMARY

The success of a post-graduate program is greatly dependent upon the efficiency of the full-time personnel. Mr. L. W. Kibler, our field director, had served for many years in a similar capacity with the Extension Division of the University of Oklahoma. In each district he contacted every physician who had not previously enrolled by mail and arranged with the local committee, appointed by the county medical society in each center, the date, time and place of the lectures.

Equally important is the ability, personality, and energy of the instructor. Dr. Edward N. Smith was particularly qualified for the position by his years of extensive post-graduate study and by his experience in private practice in a rural community. The practicability of his lectures, the number of free consultations, and the large attendance at the lay lectures attest his untiring efforts to insure the success of the program.

OTHER TYPES OF POST-GRADUATE TEACHING

While the two-year programs sponsored by the Post-Graduate Committee are the most extensive ones offered in Oklahoma, other graduate teaching is available.

STATISTICAL RESULTS

Total Counties in Oklahoma	77
Total Counties Represented	77
Total Enrollments	805
Average Percentage of Attendance	84%
Total Lecture Books Dispensed	582
Total Certificates	637
Number Private Consultations with Physicians	1,293
Number Communities having Lay Lectures	178
Total Number Lay Lectures	222
Number Attending Lay Lectures	57,337
Number Miles Traveled by Instructor	78,000

Each fall the Oklahoma City Clinical Society, composed of the majority of the members of the Oklahoma County Medical Association, conducts a four-day series of lectures and clinics with a faculty of sixteen teachers nationally known in their respective fields. A registration fee of ten dollars is charged, and at the last conference over six hundred physicians enrolled. While the majority of these were from Oklahoma, six other states were represented.

Additional opportunity for study is offered through district medical societies, such as the Southeastern Medical Society, the Southern Counties Medical Society, the Northern Counties Medical Society, and such local organizations as the Muskogee Academy of Medicine and the Tulsa Clinical Society, all of which sponsor one or two days of post-graduate work during the year.

Beginning Februray fifth of this year, the State Medical Association, in cooperation with the Women's Field Army of the American Society for the Control of Cancer and the Public Health Department of the state, is sponsoring a two-month course on cancer. This program will be made available to the laity as well as the medical profession in forty cities of the state. The full-time instructor is a Cancer Research Fellow of the Rockefeller Foundation and for three years served as a speaker for the New York City Cancer Committee.

Innumerable unsolicited letters of commendation of the obstetrical program were received by the committee, and in response to questionnaires as to further courses, the requests for pediatrics exceeded those for internal medicine by a small margin. Final arrangements have been completed for a two-year program in pediatrics, similar to the one just completed in obstetrics, and with the same administrative and financial assistance. Instruction began February 1, 1940.

We believe that the results of these programs and lay lectures have been to increase the practical and ethical standards of the profession, produce a greater unity among the members and closer cooperation and understanding between the profession and the laity; and that postgraduate education will continue as a permanent major activity of the Oklahoma State Medical Association.

THE GENERAL PRACTITIONER IN MEDICAL PRACTICE*

MORRIS FISHBEIN, M.D.
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The general practitioner has always been the fundamental factor in the distribution of medical care in the United States. President Roosevelt has said that the general practitioner is our first line of defense in the war against infantile paralysis. On the general practitioner rests the responsibility for the recognition of serious disease in its earliest stages. Indeed, it is upon the general practitioner that we must depend in the development of any sound system of medical care for which the average patient will be able to pay. Now, strange as it may seem, the advocates of revolution in the nature of the distribution of medical service in the United States concentrate their attack on this most important link in the chain of medical service, urging his inefficiency, his errors, his humanitarianism even, as reasons for his elimination. They sneer knowingly at the doctor with his little black bag. Yet millions and millions of Americans who have been welcomed into the vicissitudes of our great democracy by these very doctors with their little black bags, who have been cajoled through measles and scarlet fever, treated for cuts, bruises and abrasions, examined for life insurance, and restored on numerous occasions to physical competence by the tender ministrations of these same doctors with their little black bags, now implore feelingly in letters to the editors of publications everywhere for the return of the family doctor of yesterday.

The advocates of group practice as the ideal for all sickness fail to realize that such practice must inevitably cost more and be more difficult to secure than the services of the competent general practitioner. If group practice could answer our medical problem there would have been a rapid increase in the number of groups rather than the static condition if not a continuous decrease that seems to prevail.

The report of the Commission on Medical Education established the fact that eighty-five per cent of the conditions for which patients first consult doctors, such as pains in the back, in the head, or in the limbs, difficulty of digestion, minor skin eruptions, coughs and colds, can be diagnosed and successfully treated by a good general practitioner with the knowledge and facilities easily available to him. This conclusion has been attacked primarily by the Cabots, Richard and Hugh, who assert that post mortem examinations invariably reveal pathologic conditions which the doctors practicing individually have overlooked. Nevertheless, they have yet to submit any evidence that patients coming to post mortem in the hands of a group of doctors are invariably provided with a complete listing of all their pathologic manifestations. Indeed, there is no group which regularly submits all of the patients to all of the specialists in the group—and it is extremely doubtful that such a procedure would be worth what it would cost in time and money or in wear and tear on the patient.

Specialization in medicine evolved as it has in every other phase of activity due to the tremendous advance of knowledge and trained skills in various branches of medical practice. The time will never come when every one of these skills will be every where available in our country because the need for such services arises so infrequently that it would not be possible for the artist in neurologic surgery or in bronchoscopy, for example, to keep his hand in training. Obviously such specialists will never be available at every cross-roads. But in the organization of modern medical service around the hospital as a center, such trained services and such facilities as high voltage x-ray and radium may be made accessible to both physicians and patients.

The provision of medical service is undergoing a rapid evolution in the United States, not only as concerns new technique for meeting increased costs, but also as relates to the technique of examination, diagnosis and treatment. The vital significance of suitable relationship between doctor and patient is now recognized by all, except perhaps the economists and social workers who figure patients as units on a spot map rather than as sick human beings. They speak of so many goiters, so many ulcers and so many cardiacs, rather than of people with goiter, patients with ulcer or children with heart disease. This depersonalization of the human being is a part of the totalitarian concept which makes young men cannon fodder for the maintenance of the state. The state is not the rulers and the bureaus—the state is the people.

In the growth of medical practice in the United States the non-profit voluntary hospitals are a most significant factor. They are today the centers of medical service. They have grown out of a spiritual motive—the desire to be of service to mankind. That motive is embodied in the Christian religion. Those who would substitute the state for the hospital and the medical profession in this great work strike at the animating spirit of all our great religions.

Today the hospital acts as the center for all the medical functions including, first, care of the sick; second, teaching of doctors and nurses; third, education of the community in the prevention and care of disease; and fourth, investigation or research. Obviously any physician who wishes to progress in his work or, at least, to keep abreast of scientific advancement must have association with such an institution. There are both open

* Address presented before Methodist Hospital staff meeting, Indianapolis, Indiana, January 19, 1940.

staff and closed staff hospitals. Certainly hospitals devoted almost wholly to teaching and research and which care for the sick primarily in relationship to teaching and research may have closed staffs. But every other hospital must fulfill its obligations to the community by making its facilities fully available to qualified men. Unfortunately, it has been the tendency, because of the rise of specialization, to organize hospitals according to the specialties, and to group these as internal medicine, surgery, obstetrics, leaving the general practitioner a possibility of affiliation only as a member of the courtesy staff, or as associate in some group to which he devotes a little more attention. The injudiciousness and uneconomic aspects of this attitude should be apparent. The family doctor thus becomes merely a feeder for groups of specialists and is discouraged from following his own patients outside their homes, and beyond a certain stage in the evolution of disease. He fails to receive the intimate advantages of pathologic conferences and the teaching functions of the hospital. He may indeed be deterred from referring patients when required to the specialist because of the fear that patients may thereafter attempt to go directly to the specialists.

It is a wise concept that would make the general practitioner an integral unit in the organization of the hospital staff, providing in this way for continuous contact and follow up on his patient, for conference with consultants, and opportunity for graduate education. More important, however, for the practitioner is maintenance of his prestige with his patients. Patients have come to demand affiliation with a recognized hospital as a warranty of dependability in a physician.

Today in the United States there are some 165,000 doctors licensed to practice medicine. Of these there are about 145,000 actually in practice. More than 116,000 are members of the American Medical Association. More than 100,000 are associated in some capacity with hospitals and may use the available facilities. But we seek for them more than just the opportunity to send in a patient. The general practitioners constitute at least seventy to seventy-five thousand of the available practitioners of scientific medicine. We seek for them a voice in the conduct of the medical affairs of the hospital, and the fullest benefits that the hospital can confer upon those included as members of the staff. With such recognition the time may well come when the rewards of the general practitioner, in satisfaction of a job well done, in recognition of his service, may help to compensate him for the unending hours of toil that are his lot.

ABSTRACT—SUBJECT OF CONVALESCENT CARE NEEDS COMPLETE REVALUATION

Recent advances in knowledge of nutrition and of the adverse influence on restoration to health of body disturbances related to the mind warrant a renewed study of the whole subject of convalescence, I. Ogden Woodruff, M.D., New York, declares in *The Journal of the American Medical Association* for Feb. 10 in a discussion of this important phase of medical care.

The need for increased facilities for convalescent care is evident when it is known that of the 8,000 beds for this purpose throughout the entire country, 4,000 are in the New York City metropolitan district, which leaves only 4,000 for the rest of the United States. When it is realized that much hospitalization is necessary only because patients were not completely restored to health after previous illness, this problem appears still more important.

"The 'convalescent state' is fallaciously assumed to be a single entity, produced by a common cause, exhibiting common phenomena and amenable to common management," Dr. Woodruff says, summarizing the observations of O. H. Perry Pepper, M.D., Philadelphia, who condemns the attributing of many remote phenomena of convalescence to psychologic causes without sufficient evidence. "Dr. Pepper states that the time has come to investigate the convalescent state scientifically to endeavor to discover whatever bodily or physical causes there may be for the phenomena of convalescence."

Dr. Woodruff points out that G. Canby Robinson, M.D., Baltimore, in a paper dealing with the problems of the relation between mind and body in convalescence, "makes a distinct contribution in showing the need of attacking these problems of psychologic disturbance as they arise in the course of chronic illness. When they are found in patients with chronic illness in convalescent institutions, they increase the duration of convalescence necessary to bring about a satisfactory adjustment."

The necessity of individualized attention to the nutritional needs of the convalescent is stressed in Dr. Woodruff's review of a paper by H. D. Kruse, M.D., Baltimore, in which he states: "Frequently, especially in the low income group and in various diseases, the diet of the patient prior to his entering the hospital falls short of containing the minimum amount of the required essentials so that the patient frequently arrives for treatment in a condition of nutritive inadequacy. A further drain on nutrition may be produced by an episode of acute illness, during which frequently in the hospital no attempt is made to meet the nutritive requirements of the individual in respect to his particular disease process and his previous dietary inadequacy."

Regarding what he considers the two most important opportunities in convelescent care usually neglected, Dr. Woodruff says: "The first of these is the opportunity for the discovery and adjustment of environmental factors and family situations which may have contributed to the occurrence of the patient's illness and which may be militating factors against the preservation of health, once recovery is attained.

"The second opportunity is that of helping the patient during this period of rest and relaxation to evaluate himself, to take account of stock, to consider his habits of life and work in relation to their effect on his health."

Dr. Woodruff mentions numerous diseases whose victims require special consideration during convalescent care. These include heart disease, kidney and urinary disorders, digestive and respiratory ailments, cancer, psychiatric disturbances, certain nervous diseases, certain surgical operations and orthopedic conditions. The recently delivered mother, young children and the aged also require special attention.

DIAGNOSIS AND TREATMENT OF PERIPHERAL VASCULAR DISEASE *

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In order that our discussion of peripheral vascular disease may be practical and clinical in its point of view, we shall start with the problem of diagnosis which is seldom self-evident.

We shall assume that whatever symptoms of claudication, pain, paresthesia, coldness, trophic change or abnormal color may be present in a given case, already have led to general medical and laboratory examination and that general infections and constitutional disorders, which only incidentally and temporarily produce these symptoms, have been excluded.

We shall also take it for granted that gross pathological processes in the bones, joints and soft tissues of the extremities, such as rickets, osteomyelitis, arthritis, etc., have been ruled out.

The next step in systematic investigation is careful neurologic examination.

Often there is little choice whether this examination should precede the vascular one or follow it. The important point is that it shall not be omitted, as even the proved presence of vascular disorder does not exclude the possibility of nervous system lesions. Tabes dorsalis, occult spina bifida with nerve root involvement, old poliomyelitis, peripheral neuritis from various causes, injuries or tumors affecting the spinal cord, syringomyelia and other nervous system lesions may co-exist with vascular disturbances and be most important for the prognosis as well as in explaining symptoms.

Examination of the peripheral vascular system itself traditionally begins with investigation of the structural integrity of the vessels. The methods of palpation of arterial trunks for sclerosis, roentgenography for the demonstration of calcification, and the posturing of limbs to bring out pallor and rubor under the influence of gravity, etc., are so well known as to require no further comment. They have been supplemented in recent years by the following two less well known methods: (1) contrast arteriography using thorotrast as an intraluminal medium, which provides satisfactory demonstration of arterial occlusions and of collateral circulation[1]; and (2) investigation of arterial elasticity by means of the oscillometer. By comparing the oscillations in the vascular bed with the normal, deviations in the amount of blood flow may be inferred.

A decade or two ago examination of the peripheral vessels would have been considered quite complete with this inventory of organic changes. Now, however, it is recognized that functional or physiological changes in the behavior of the peripheral vascular system may be extremely important. After all, the great significance of peripheral vascular disease is simply diminution in the amount of blood circulating in a member or in some part of a member. Such diminution is now known to result not only from permanent decrease of the intraluminal volume of the vessels themselves but from abnormal conditions of vasoconstriction.

The greater recognition of the functional factor in peripheral vascular disease has led to a change of attitude regarding treatment. Obliterative structural changes in the blood vessels are irreversible and, therefore, untreatable in themselves, although the resulting ischemia may be overcome by favoring the development of collateral circulation by methods to be described later. Abnormal states of vessel spasticity, on the other hand, are known to be rather easily reversible and offer the clinician an attractive field for therapeutic effort. Even with these, however, the exception should be made that treatment is less promising when eventual secondary changes have occurred.

Thus far it would appear that our problem is to distinguish between two sharply demarcated clinical entities. The problem is not quite so simple, however. Experience shows that functional disorder, that is, vasospasm, accompanies structural vascular lesions in many cases, and we have just now intimated that structural changes may ensue in long-standing cases which were entirely or chiefly functional at the outset. The diagnostic problem boils down, then, to one of determining, in every case of peripheral vascular disorder, the extent to which reduced blood flow is attributable to organic vessel change, and the extent to which it may be laid to vasospasticity. Since methods of investigating the structural states have been mentioned, it now remains to discuss briefly the estimation of vasospasticity.

It was established many years ago that vasoconstriction is partly under central control and that the constrictor impulses reach the vessels by proceeding from the spinal cord over the white rami communicantes, to the sympathetic chain lying on either side of the spinal column. From the sympathetic ganglia the impulses make their way over the gray rami to the spinal nerves and thence to their distribution in the walls of the vessels. Our knowledge of this pathway enables us to bring about a temporary suspension of the sym-

* Presented before the Section on Medicine of the Indiana State Medical Association at the Fort Wayne session, October 11, 1939.

[1] Baker, T. W.: Diagnostic Value of Arteriography. Staff Meetings of Mayo Clinic, August, 1936.

pathetic system influence over any particular vascular territory.[2]

When such a period of suspension of sympathetic tonus is brought about, the amount of improvement in blood flow may be estimated. This improvement is the measure of the vasospasm implicated in the clinical disorder.

Improvement in blood flow in a member may be quite accurately estimated by using the oscillometer which, as we have previously noted, is also serviceable in estimating reductions of blood flow from organic lesions. The utility of the instrument may be illustrated as follows: if oscillometric readings are only 50% of normal and if these readings improve to 75% of normal after temporary suspension of sympathetic influence, it becomes clear that half the reduction in blood flow is due to vasospasm and half is due to organic changes in the vessels.

Improvement in blood flow during a test period of suspension can also be measured by noting elevation in surface temperature by means of a thermocouple applied to the skin of the member in question. When vasospasm has been broken down by one of the methods producing general elevation of body temperature, the ratio of the rise in skin temperature to the rise in general body temperature becomes the measure of the vasospasm prevailing before the febrile state was induced. For instance, if the general body temperature rises three degrees and the local skin temperature only three and one-half, only a negligible amount of vasospasm can be deduced.

This leads us to a brief consideration of methods available for temporarily suspending sympathetic control over peripheral blood vessels. These methods may be classified on the basis of whether the effect is general, or is restricted to a certain territory of the body.

The most commonly used methods of producing a general suspension of sympathetic tone are as follows[3]: (1) Administration of certain anesthetic agents. Pentothal sodium given intravenously is one of the most useful. (2) Induction of artificial fever by intravenous injection of a foreign protein such as typhoid bacterin. (3) Induction of artificial fever by increasing environmental temperature and preventing radiation of body heat.

Methods of suspending sympathetic influence locally are as follows: (1) Injection of novocain into and around the ganglia known to supply vasoconstrictor impulses to the member in question. (2) Injection of novocain into the nerve trunks supplying the territory to be tested. (3) Intrathecal injection of novocain as in ordinary spinal anesthesia. (4) The local use of an air or water bath to influence vasoconstrictor tonus in either direction. For instance, the response seen in a hand affected by Raynaud's disease on immersion in ice water is highly diagnostic. Also improvement in circulation after immersion in hot water affords a measure of the spasm by comparison with the other hand which is left untested as a control.

TREATMENT

The treatment of peripheral vascular disorders must necessarily be taken up under two headings in view of the dual factors involved.

The most important means of circumventing the disagreeable and often disastrous effects of occlusive arterial disease is the use of alternating positive and negative pressure apparatus (pavex). Quite simply stated, its effectiveness depends upon facilitating a compensatory hypertrophy of collateral blood vessels.

Indications for the use of passive vascular exercise are as follows: (1) Acute arterial occlusion from any cause. (2) Acute circulatory stasis of peripheral cause, as in frozen extremities. (3) Chronic obliterating arteriosclerosis of either major or secondary arteries, and (4), early thrombo-angiitis obliterans in the intervals between acute attacks.[4]

Since passive vascular exercise has been so widely popularized it seems doubly important to emphasize important contraindications, the ignoring of which may lead to disaster. Some of these are as follows: (1) Active thrombophlebitis. (2) Cellulitis of any extent whatever and whether acute or subacute. (3) Lymphangitis. To these may be added certain other contraindications, not so much because of dangers involved, as because of futility. It is obvious that drawing an increased amount of arterial blood to a member will fail of its purpose if there is widespread occlusion in the capillary bed, or in the pre/and post-capillary vessels on either side. We may add to the contraindications, then, the following conditions: (4) Arteriolar obliterations. (5) Capillary thrombosis. (6) Capillary stasis in advanced thrombo-angiitis obliterans; and (7) Capillary stasis in advanced arteriolar sclerosis.

From these considerations it is evident that the use of passive vascular exercise on a trial and error basis may often lead to disappointment, useless expense, loss of valuable time and eventual tragic results. On the other hand, passive vascular exercise may be used to good purpose as a therapeutic test provided the contraindications

[2] Merrell, Paul: Diagnostic Procedures for Peripheral Vascular Disturbances. *Arch. Phys. Therapy,* March, 1939, Vol. 20, pages 162-165.

Zeiter, Walter J.: Differential Diagnosis of Common Peripheral Vascular Diseases. *Cleveland Clinic Quarterly,* 6:127 (April) 1939.

[3] Adson, Alfred W.: Physiologic Effects Produced by Ablation of the Autonomic Central Influence. Various Forms of Sympathectomy in Treatment of Diseases. *Surgery,* Vol. 1, No. 3, Page 425, March, 1937.

[4] Herrmann, Louis C., and Reid, Mont R.: The Pavaex (Passive Vascular Exercise) Treatment of Obliterative Arterial Diseases of the Extremities. *Journ. of Medicine,* Dec., 1933.

de Takats, Geza, Chicago, Obliterative Vascular Disease. *J.A.M.A.,* Dec. 22, 1934, Vol. 103, pp. 1920-1924.

which have been mentioned are borne in mind. It must be said that this and other mechanical methods of fostering collateral circulation have proved themselves of enormous worth in saving lives and limbs which would certainly have been lost before the invention of these methods of treatment.

In those disorders which are predominantly vasospastic, as shown by the tests which have been outlined, treatment is aimed at producing a permanent territorial suspension of sympathetic tonus by a correctly conceived operation. Perhaps the simplest measure of all is resection of a portion of the peripheral nerve-supplying branches to the vascular distribution which is to be influenced. This procedure is but little used as it involves prohibitive sacrifice of function except in a few restricted localities. Nerve resection at the ankle may be used to advantage when vascular and painful conditions in the foot prove resistive to less destructive methods.

Perivascular sympathectomy[5] by stripping adventitia from the main stem artery to the territory in question is sometimes of great value. The operation has the limitation that sympathetic fibers from the peripheral nerve trunks are given off to the vascular tree at all different levels. Therefore, resection of a cuff of adventitia can never serve to interrupt more than a fraction of the sympathetic innervation. However, this fraction is sometimes just sufficient to yield a good clinical result.

Ablation of sympathetic ganglia, together with intervening portions of the sympathetic trunk, has been widely employed. For vasospastic disorder in the lower extremity, the second, third and fourth ganglia are resected. For the same condition in the upper extremity, the inferior cervical and the first and second thoracic ganglia are resected.

Because of certain inadequacies of the ganglionectomies just mentioned, efforts have been made to sever the sympathetic pathway more centrally. Smithwick, for instance, advocates the severance of the white rami communicantes to the ganglia supplying the upper extremity. It is apparent that this operation interrupts pre-ganglionic fibers and that the post-ganglionic neurones remain intact. The rationale of this plan will be explained shortly. Page and Heuer[6] as well as Adson have practiced the resection of ventral nerve roots within the spinal cord as a means of severing pre-ganglionic sympathetic fibers. This procedure involves laminectomy and is extravagant of intercostal and abdominal muscle function. However, it has a possible advantage in connection with the rationale just referred to in Smithwick's operation.

[5] Adson, Alfred W., Indications for and Value of Various Types of Sympathectomy. *The Military Surgeon*, Vol. 83, No. 4, October, 1938.

[6] Page, Irvine H., and Heuer, Geo. J.: The Effect of Splanchnic Nerve Resection on Patients Suffering from Hypertension, from *Amer. J. Med. Sc.*, June, 1937, No. 6, Vol. 193, Page 820.

The point of both Smithwick's[7] and Adson's[8] attack upon the pre-ganglionic segment of the sympathetic supply is that there appears to be a humoral factor in peripheral vasospasm as well as a neurogenic factor. Awareness of this fact grew out of the discrepancy between therapeutic results obtained in the upper and lower extremities. Lumbar sympathectomy for Raynaud's disease in the lower extremity yields permanently good results. Cervico-dorsal sympathectomy (ganglionectomy) for Raynaud's of the upper extremity yields results which are often short-lived. The most satisfactory theory to account for this discrepancy is that lumbar ganglionectomy leaves intact the most peripheral sympathetic ganglia. The most distal post-ganglionic neurones therefore do not degenerate. In the upper extremity, on the contrary, the cell bodies of the most peripheral sympathetic neurones lie in ganglia which are resected. It is thought that the vessels in the upper extremity become abnormally sensitive to circulating epinephrine after degeneration of the post-ganglionic fibers. In Smithwick's[9] operation wherein the white rami are severed, the post-ganglionic fibers remain intact as in the lumbar sympathectomy for Raynaud's of the lower extremity. Abnormal sensitiveness as to vasomotor hormone (epinephrine) therefore does not develop and vasodilatation is more permanent.

Adson's operation aims at this same humoral factor as it severs fibers destined to reach the adrenal glands. Hyperadrenalinemia is therefore not likely to occur reflexly upon exposure to cold or even from central stimuli such as emotional activity. A recurrence of vasospasm is, therefore, doubly insured against, as there is no degeneration of the post-ganglionic fibers, and as peak-loads of circulating epinephrine are prevented.

We are aware that this discussion of various operations upon the sympathetic system is taking us too deeply into theoretical problems. It will be better for practical purposes, we believe, to summarize briefly some of the conditions in which sympathectomy of one type or another offers expectation of improvement:

(1) Raynaud's disease;

(2) Thrombo-angiitis obliterans with marked vasospastic features;

(3) Vasospasm in old poliomyelitis;

(4) Scleroderma;

(5) Certain other conditions not far removed from peripheral vascular disease such as osteoporosis (Sudeck's atrophy), hyperhidrosis, and causalgia. We are leaving out of account, as entirely

[7] Smithwick, Reginald H.: Modified Dorsal Sympathectomy for Vascular Spasm (Raynaud's Disease) of the Upper Extremity. *Annals of Surgery*, Vol. 104, Sept., 1936, No. 3.

[8] Adson, Alfred: Raynaud's Disease; Diagnosis and the Report of Results Obtained by Extensive Sympathectomy. Surgical Clinics of North America, August, 1937, Page 1051.

[9] Smithwick, R. H.: The Value of Sympathectomy in the Treatment of Vascular Disease. *New Eng. J. Med.*, 216:141 (January 28) 1937.

beyond the scope of this paper, such conditions as essential hypertension, angina pectoris, retinitis pigmentosa, dysmennorhea, neurogenic bladder, etc.

Before concluding our remarks on treatment of peripheral vascular disease, we wish to emphasize that it is not entirely a question of elaborate apparatus for improving circulation in organic lesions, or a question of fancy operations for combatting vasospastic conditions. There are a great many *simple* measures and *simple* precautions which can and should be put into effect by the physician in general practice. No one has emphasized these simple measures more tellingly than Mont R. Reid. Briefly, these suggestions are (1) to recognize the dangers of impaired peripheral circulation, with full awareness of the threat of trophic ulcers, gangrene and the like; (2) to improve general health and general circulation, and particularly to get under control diabetes or other constitutional disease; (3) to advise as to the optimum posturing of extremities when resting; (4) to recommend protection from cold by the use of mittens, woolen socks, etc.; (5) to warn patients with reference to mechanical and thermal traumas; and (6) to instruct patients in the local hygiene of the feet for prevention of infection. These homely and common sense measures may serve to prevent or postpone tragedy, and are as well worth the thought of physicians as are the highly technical operations which we have reviewed so briefly.

We would regret to leave the subject of peripheral vascular disease without some mention of the broader pathologic significance of the two chief conditions which have given us concern. We shall only refer to the large literature on the significance of occlusive arterial disease, especially of arteriosclerosis. The greatest speculative ingenuity has failed to give a final answer as to its etiology or to yield a certain clue as to why it should plague such a large percentage of people in their later decades. With vasospastic disorder, the situation is comparable. From numerous pathologic investigations it appears certain that there is no lesion in the sympathetic ganglia, in the spinal cord, or in the brain leading to this abnormal tonus. That sympathetic hyertonus in the periphery is associated with reflexive hormonal activity seems established for many cases, but the problem is only advanced and not solved by this knowledge. Perhaps the most suggestive evidence lies in the fact that vasospastic activity is closely connected with emotional and environmental factors. A practical consequence of this correlation is the prospect of favorably influencing some vasospastic conditions by psychotherapy or by inducing patients afflicted with them to make changes in their environment.

ABSTRACTS

A METHOD OF TAKING X-RAY PICTURES OF CHAMBERS OF HEART

A method for taking x-ray pictures of the chambers of the heart and the blood vessels of the lungs and chest, thus making for more precision in the diagnosis of ailments affecting those parts, is described by George P. Robb, M.D., and Israel Steinberg, M.D., New York, in *The Journal of the American Medical Association* for Feb. 10.

The two men point out that although the x-ray has become almost indispensable to the accurate diagnosis of heart and lung diseases it has given an incomplete picture because the four separate chambers of the heart and their component parts are shown by one shadow and the blood vessels of the chest are seen indistinctly if at all. Diagnosis therefore has had to rely on such indirect evidences of disease as alteration in the size, shape and pulsation of the heart and blood vessel shadows.

By injection of a harmless substance, diotrast, which is impenetrable to the x-rays, and taking x-ray pictures as the substance passes through the heart and blood vessels of the lungs and chest, the two doctors obtain pictures in which the involved parts stand out in contrast to their surroundings.

"No serious consequence," Drs. Robb and Steinberg point out, "has followed 486 injections of 233 patients, many of whom were seriously ill. The method is safe and practical. The technic is exacting, requiring dexterity, precision, speed, teamwork and strict adherence to detail. Proficiency, however, can be acquired through training and practice, and successful performance should be within the capability of every medical center."

The method is most useful in disorders such as widened saclike areas of arteries or veins filled with blood (aneurysm), disease of the aorta, malformations of the heart and veins at birth and disease of the tissues around the heart.

PREVENTING PRINTERS' SKIN AILMENT

The necessity of strict attention to the prevention of skin eruptions among plate printers, due to inks and cleaning materials, is brought out by P. A. Neal, M.D., Washington, D. C., in *The Journal of the American Medical Association* for February 17.

Dr. Neal's study of 318 plate printers and their forty-seven assistants showed that a considerable percentage had suffered for many years from recurrent skin lesions of the hands and arms. By applying to the skin a patch of the different inks and cleansing materials used to clean the plates and the hands and arms of the workers, Dr. Neal proved that these substances were the cause of the eruptions.

In addition to recommending complete preemployment examinations for plate printers and periodic examinations thereafter, with particular attention being paid to evidences of skin diseases, the author suggests that workers handling cleaning fluids should wear rubber gloves and that clean towels and clean aprons should be furnished to the workers daily. The use of a common oil trough or of strong cleaning agents and alkalis should be discontinued. Shower baths and wash rooms should be scrubbed daily with soap and hot water. Individual paper sandals should be furnished workers using the shower baths, and separate lockers for work clothes and street clothes should be furnished plate printers to prevent soiling the street clothes with the inks and other substances capable of producing dermatitis.

CORONARY OCCLUSION WITH MYOCARDIAL INFARCTION

THREE CASES WITH SERIAL ELECTROCARDIOGRAMS

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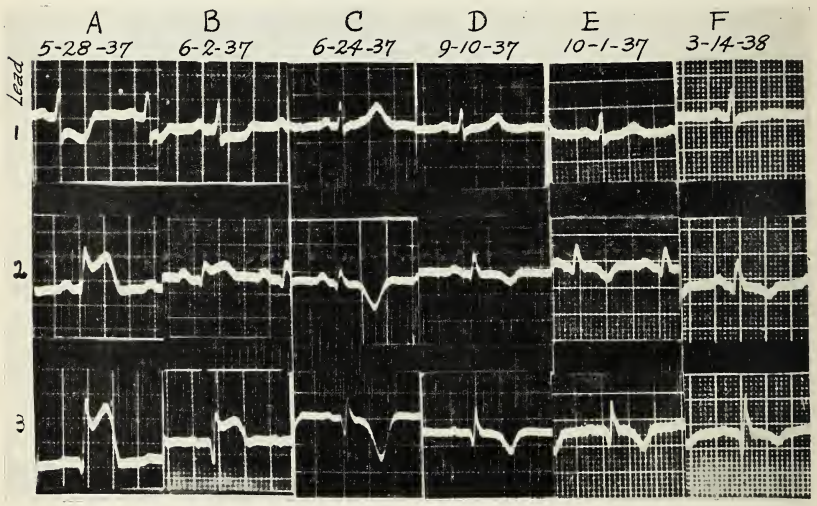
The purpose of this paper is to emphasize the value of taking electrocardiograms early after the onset of the pain in suspected cases of coronary occlusion in order to obtain the most characteristic pattern; also, the desirability of frequent tracings in the first few days following the attack in order to record changes in the pattern, some of which do not appear immediately. For example, in case 3 in the record of December 7, 1939 (Plate III, *C*, lead 2) there occurred a sudden and unusual change from an upright P wave to an isoelectric one while the tracing of lead 2 was being made and then on January 1, 1940 (Plate III, *F*, lead 2) the P has again become positive.

A review of the voluminous literature concerning coronary occlusion is not undertaken; however, citation may be made of the excellent report of 107 clinical cases by Barnes[1] and a paper by Feil, Cushing and Hardesty.[2]

Case 1: A white male, age 55, who had never had any previous serious illness, on May 28, 1937, while at work at his occupation of machinist, suddenly developed a severe burning pain in the midsternal region radiating to both arms and wrists. Later he admitted having a dull pain in the same area on the previous day and that he felt very tired in the early morning prior to the attack.

[1] Barnes, A. R., Electrocardiogram in Myocardial Infarction. Arch. Int. Med. **55**, 457-483 (1935).

[2] Feil, H., Cushing, E. H. and Hardesty, J. T., Accuracy in Diagnosis and Localization of Myocardial Infarction. Amer. Heart Jour. **15**, 721 (1938).



Interpretation of Plate I (Standard Leads):

A. Recorded three hours after onset of precordial pain, demonstrates the initial changes of acute coronary occlusion involving the posterior wall of the ventricle according to the criteria established and proven by Barnes[1], Feil, Cushing, Hardesty[2] and others through experimental and pathological findings at autopsy. The "high take off" of the R $T^{2,3}$ segments, a distinct Q^3 and the depression of S T^1 found in A are the characteristic features present in myocardial infarction due to sudden occlusion of a coronary artery supplying the posterior wall.

B. Recorded five days later, shows changes similar to A though less marked. Tracings C, D, E, F, taken 27 days, 15 weeks, 18 weeks, and 10 months, respectively, from the date of the attack, show the dome shaped S T segment in leads 2 and 3, sharply peaked T waves and the gradual reduction in depth of the inverted $T^{2,3}$ from C. to F. The development and exaggeration of Q^3, which finding tends to persist indefinitely, is well shown.

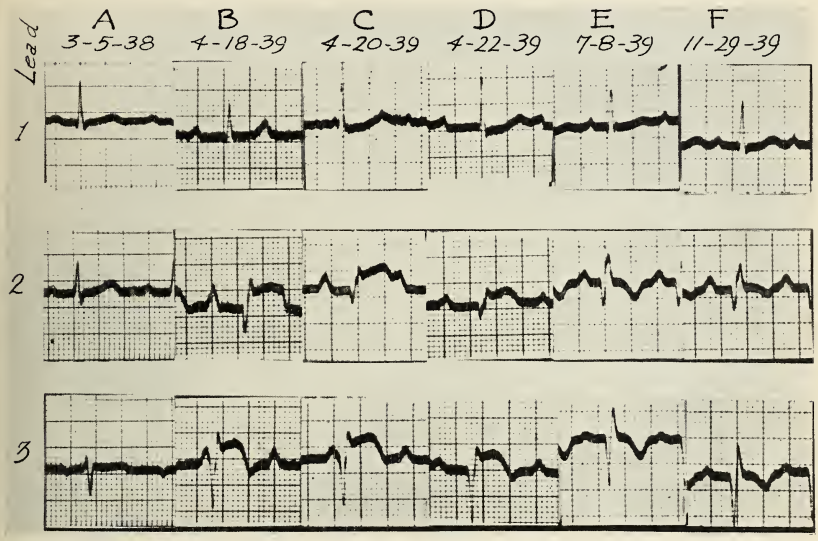
The past personal and family history is irrelevant.

When first seen he presented an ashen gray color, the clinical picture of shock, and was in great agony. The blood pressure was 120/90, pulse regular at 50; heart tones were faint, but there was no pericardial friction rub. The pain did not entirely subside for three days despite the use of opiates. A marked oliguria was present during this period but there was no glycosuria. Aminophyllin, gr. 1½, t.i.d., was begun on the fourth day following which the urine output increased and the pain gradually disappeared. He made steady improvement and after eight weeks in bed he began to sit up for short periods daily. Finally on August 20, 1937, he was able to come to my office for examination which revealed blood pressure of 140/92; all heart sounds present with no murmurs and the heart was not increased in size to percussion (x-ray not available). He resumed light work in November 1937 and the aminophyllin was discontinued in March, 1938. At the last examination, April 16, 1939, his blood pressure was 138/98 and he has not missed a day at his regular work since that time.

Typical sections of the series of electrocardiograms beginning with the one taken about three hours after the onset of pain are shown in Plate I.

Case 2: I examined this man, white, age 67, February 5, 1938, because he complained of having become suddenly weak, experienced profuse perspiration, and his heart had become very rapid following which he had a bloated feeling in the epigastrium associated with nausea.

An electrocardiogram taken on this date revealed paroxysmal auricular tachycardia and another taken on the following day, after the rapid action had subsided, showed no evidence typical of myocardial infarction. Neither of these tracings is included in this report since its purpose is to present an acute coronary occlusion which he experienced on April 16, 1939. However, before entering into that phase, I wish to refer to an examination and electrocardiogram made on March

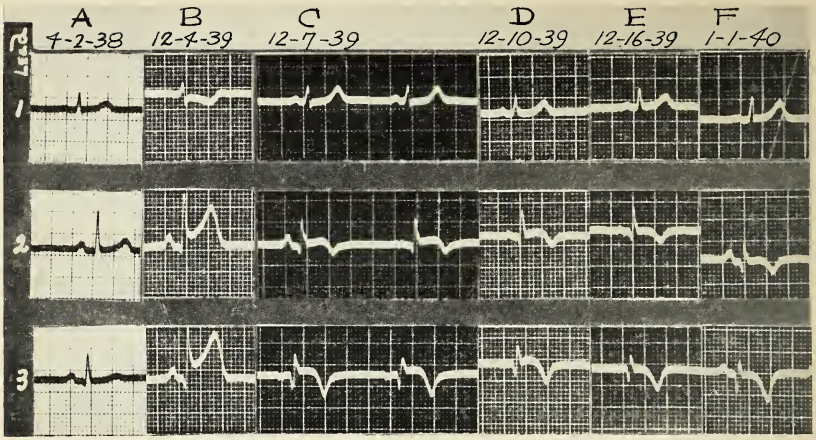


Interpretation of Plate II (Standard Leads):

A. In this tracing made one year prior to the coronary occlusion there is nothing abnormal except left axis deviation. The P R interval measures 0.2 sec.; the T in each lead is upright and rounded at its apex.

B. This graph, recorded two days after the onset of precordial pain, demonstrates again an acute myocardial infarction of the posterior wall of the left ventricle and, in addition, there is shown damage to the auriculo-ventricular conducting system by involving part of the septum (Feil[2]). Here and in **C. D.** two days and four days, respectively, after onset, is depicted elevation and upward convexity of R $T^{2,3}$, deep $Q^{2,3}$, also dissociation between occurrence of P waves and Q R S complexes.

In **E** and **F**, taken 11 weeks and 7 months respectively, following the occlusion, the dome shaped S $T^{2,3}$, inverted $T^{2,3}$ and upright T^{1} are shown. Also, the disturbance in A.V. conduction has disappeared and the P R interval is now 0.2 sec. but, a delay in bundle conduction is manifested by the prolongation of the Q R S complex in $\mathbf{E}^{2,3}$ and $\mathbf{F}^{2,3}$ to 0.12 sec.



Interpretation of Plate III (Standard Leads):

A. The sections of each lead show a normal electrocardiogram.

B. Recorded 3 hours after onset of the attack. The typical elevation of the R T segments, or "high take off," is shown in leads 2 and 3.

C. Made three days later, 12-7-39. While taking the tracing of lead 2, the P wave dropped from positive to isoelectric level. The P remained in this state through pictures **D** and **E** in all leads. It is observed to be positive again in **F**, on January 1, 1940. Otherwise the changes in the contour of the component parts follow a course similar to those of cases 1 and 2. The sharp peaking of the T waves is best seen in C, D, E, and F. The $Q^{2,3}$ are present, the latter exaggerated in depth. The entire pattern here presented is again that of aninfarction of the posterior wall of the ventricle.

5, 1938, (Plate II, *A*). On this date it was determined that he had a fine tremor of the hands; an enlarged thyroid which was mostly substernal; normal blood pressure of 128/72, pulse regular at 88 per minute; heart tones distant with no murmurs nor evidence of enlargement to percussion. The only other important finding was an hypertrophied prostate. The urine was negative for albumin and sugar.

The coronary occlusion mentioned above occurred at 2 A. M. April 16, 1939, with agonizing pain over the heart region radiating down the left arm. I saw him on the following day with his family physician, at which time his color was ashen; pulse 112 and thready; blood pressure 118/80; temperature 100° and a distinct pericardial friction rub was present. The urine contained 1+ albumin and 1+ sugar; oliguria had been present for 24 hours. Opiates were administered and aminophyllin gr. 1½ q. 4 hr. was begun. The electrocardiogram taken April 18, 1939, is shown in Plate II, *B*.

The patient gradually improved after a stormy convalescence which included acute urinary retention requiring an anchored catheter. At the last office examination, November 29, 1939, he reported that he was able to walk several blocks daily and expected to resume work within two months. An electrocardiogram taken on this date is presented in Plate II, *F*, showing the residue from his coronary occlusion. The physical findings at this time were uninforming; the blood pressure was 118/80; the urine was free from sugar and albumin and the tremor of the hands and fingers was much less intense.

Case 3: This patient, a white female, age 59, was first examined, April 2, 1938, because of a sensation of tightness over the breast bone occurring after exertion or walking rapidly and lasting two or three days. The condition had been noticed since 1929 but was at no time severe enough to force her to stop or go to bed. Otherwise the history is irrelevant except that a brother died of coronary occlusion at 55; her father suffered from angina pectoris and died at 76 of cerebral hemorrhage.

The examination at this time revealed a slenderly built woman who did not appear ill. The heart and lungs were normal throughout; blood pressure was 134/102; urine normal; R. B. C. 4,700,000; W. B. C. 4,660; Hbg. 90%; electrocardiogram (Plate III, *A*) normal.

On December 4, 1939, she awakened at 7 A. M. with severe substernal pain under manubrium, radiating to both arms and back, associated with nausea, vomiting and a sensation of impending death. The blood pressure at 8 A. M. was 90/50;

(*Continued on page* 157)

Medicine Today

"Be not the first by whom the new are tried, nor yet the last to lay the old aside."

FRANK B. RAMSEY, M.D.
INDIANAPOLIS

Tuberculous Lymphadenitis of the Neck. The results of treatment in 161 cases of tuberculous cervical adenitis are summarized in a recent report from the Lahey Clinic. It is pointed out that radical excision of tuberculous glands has rapidly lost favor during the past few years. This is due to the fact that it is difficult to remove all the involved lymph nodes and also because unsightly scars frequently result. The surgical procedures have therefore become more conservative and consist mainly of the incision of caseous glands or the removal of isolated glands. Excision of single glands is to be recommended since this allows a more accurate diagnosis and will rule out other tumors of the neck such as lymphosarcoma, aberrant thyroid tumors, metastatic malignancy and cysts.

Radiation therapy in 111 cases in this series showed uniformly good results. Radiation was employed following conservative surgical procedures in 57 cases and alone in 38 cases. The surgical treatment was limited to excision of broken down glands and removal of single glands for purposes of diagnosis. This type of combined therapy is now recommended in almost all cases. The post-operative x-ray treatment is found to hasten the healing of draining sinuses and also favored the resolution of other glands in the neck.
—The Lahey Clinic *Bulletin*, January, 1940, Page 2.

Carcinoma of the Larynx. During the past few years the surgical and irradiation treatment of carcinoma of the larynx has been greatly improved. The entire procedure of diagnosis and treatment is systematically reviewed by New. As is true with so many surgical conditions, early diagnosis is extremely important. The good results obtained by laryngectomy and radiologic treatment encourage the early diagnosis of a malignant lesion in the larynx. The most common early symptom is hoarseness and because of this fact all adult patients who are hoarse over a period of a month should have a careful examination to make sure that their hoarseness is not due to malignancy.

Growths of low malignancy which are discovered in an early stage of development may sometimes be removed by local operations which preserve most of the laryngeal structures. Other malignancies of more invasive character but which have not extended beyond the larynx may be removed by laryngectomy. The removal of the entire larynx can be carried out with a low mortality rate. Recent advances have been made in providing an artificial larynx. These devices function so perfectly that the patients are able to carry on their normal activities even after complete removal of the entire larynx. In addition to the more favorable cases, many of the advanced lesions are amenable to diathermy excision and palliative roentgentherapy.
—Gordon B. New, M.D., *Surg., Gyn. and Obs.*, 68:462.

Chronic Ulcerative Colitis. After acute ulcerative colitis has entered the chronic stage, the colon is frequently very much reduced in size due to scar tissue. Ulcerations in the scarred wall of the colon do not heal and the function of the diseased bowel is lost. Usually patients who have reached this stage of colitis have had an ileostomy at some stage during the acute process. The ileostomy is done as a life saving measure and if the patients continue to run fever over a long period of time after the colon is short-circuited, it is possible to relieve them by complete colectomy. This can be done in stages and can be accomplished with a low mortality rate. The large bowel in these cases is often scarred to the point of stricture and is useless as an organ of elimination. However, Rankin recommends that only those scarred colons which continue to produce fever and chronic invalidism should be removed. His experience with this operation has been encouraging. He emphasizes the fact that ulcerative colitis is primarily a disease to be treated medically and that surgery should be employed only after all other measures have proved futile.
—Fred W. Rankin, *Surg., Gyn. and Obs.*, 68:306.

Traumatic Conditions of the Kidney. A symposium on injuries of the ureters and kidneys is reported in a recent number of the *J.A.M.A.* In one of these articles Prather classifies the various grades of kidney injury and discusses methods of diagnosis and indications for surgical treatment. A contusion of the kidney is the mildest traumatic state which will give symptoms and usually requires no specific treatment. Hematuria is present in all these cases but gross blood is present in only sixty per cent. There is little or no shock associated with a contused kidney and intravenous pyelography usually shows no abnormality except decreased secretion of the dye on the affected side.

More serious kidney injuries consist of subcapsular rupture, laceration of kidney and capsule, and severance of the renal pedicle. Each of these conditions is associated with gross hematuria, with varying degrees of shock, and with tenderness and swelling and muscle spasm over the kidney. Diagnostic measures to be applied consist of intravenous

pyelography and retrograde pyelography. In the more severe injuries, investigation of the injured kidney by cystoscopy is recommended but a pyelogram of the good kidney should not be done because of the danger of urinary suppression.

Prather emphasizes that all patients need to be treated first of all for the shock, if it is present, and must be investigated carefully for other injuries which are usually present. The question of nephrectomy and surgical exploration of the kidney cannot be settled on any definite indications. Each case must be considered individually. The only general rule that seemed to be applicable to all cases was that surgical intervention was indicated where increasing tenderness in the lower abdominal quadrant and psoas spasm was present over a period of from 24 to 48 hours. Other articles in this symposium give very full consideration to injuries of the ureter from all causes.

—*J. A. M. A.*, 114:207 (Jan. 20, 1940).

CASE REPORT: OCCLUSIVE VASCULAR DISEASE OF THE ABDOMEN*

J. K. BERMAN, M.D.
H. C. THORNTON, M.D.
INDIANAPOLIS

The patient, a white man, 38 years old, was admitted to the psychopathic ward of the Indianapolis City Hospital, October 13, 1936. He had been irrational at intervals for three weeks during attacks of abdominal pain. When he was free of this pain he was rational and cooperative. He had lost fifty pounds in weight during the preceding six weeks. He had been unable to take sufficient nourishment because eating caused pain. The night before admission to the hospital he had had a severe attack of pain "requiring three men to hold him down." The chief complaints on admission were (1) severe abdominal pain, generalized and constant; (2) attacks of vomiting; (3) pain in scrotum; (4) burning on urination, and (5) tendency toward constipation.

The patient began to have stomach trouble, according to his story, about July 1, 1936. There was pain after eating, mild at first but gradually growing worse. Baking soda failed to relieve the pain. Lying on the abdomen or the application of a hot water bottle relieved the pain at first. As the pain grew worse, he began to vomit. However, he vomited only three or four times altogether. An x-ray examination of the stomach on September 21, 1936, revealed a peculiar converging of the rugae in the posterior wall of the pars media, spasticity and narrowing of the pylorus, and rapid emptying of the stomach. An x-ray examination of the gall bladder following sodium tetraiodophthalein on September 30, 1936, resulted in visualization of the gall bladder at fifteen hours, with a definite increase in density at eighteen hours. A few areas of decreased density suggesting possible non-opaque stones were noted.

The patient entered another hospital September 26, 1936, and remained about a week. He seemed to improve somewhat during his hospital stay. After he left the hospital the abdominal pain became worse, and a few days before he was admitted to the Indianapolis City Hospital, which was on October 13, 1936, the pain became more or less constant.

Pain in the scrotum accompanied the abdominal pain, but it is not clear from the history just when this pain started. It was more or less constant and was made worse by coughing and somewhat worse by urinating. Three or four weeks before his admission to the Indianapolis City Hospital, the patient noticed that he had to strain more than usual to urinate. On admission to the hospital one of his complaints was burning on urination.

Except for gonorrhea in 1919, 1935, and 1936, nothing in the past history seemed to be of particular importance.

Physical Examination: The patient was lying in bed with knees flexed, complaining of generalized abdominal pain. This was soon relieved by the administration of ¼ grain of morphine sulphate. The temperature was 101.4° F., pulse 100, respiration 25. The pharynx was fiery red, and the tongue was very red, dry and fissured. There was some cervical "adenopathy." Some cyanosis of the finger tips was noted. The systolic blood pressure was 130 and the diastolic 70.

The entire abdomen was soft. Palpation was painful over the lower abdomen but not over the upper abdomen. The patient belched gas from time to time. On palpation of the lower abdomen a vague impression of fullness was obtained. There was some tenderness in the region of the left costovertebral angle.

Rectal examination was painful, and there was a suggestion of redundancy of the rectal mucosa. The prostate was small and firm. Inguinal "adenopathy" was noted.

The impressions after the first examination were: genito-urinary syndrome; prolapsed rectum; intussusception.

Laboratory Examinations: W.B.C. 40,100; urine, dark color, specific gravity 1.027-1.033 on different

* From the surgical and pathological services of the Indianapolis City Hospital, and the Departments of Surgery and Pathology of the Indiana University School of Medicine.

occasions, 1 plus to 2 plus albumin on different occasions, 10-15 pus cells per high power field, occasional red blood cell; blood Wassermann and Kline, negative; P.S.P. kidney function test, 55% excretion of dye in two hours; spinal fluid negative except for a slight change in the colloidal gold curve of questionable significance; serum bilirubin, 2 mg. per 100 cc., direct delayed reaction.

Neurological Consultation (October 15, 1936): Abdomen distended with gas and painful. Acrocyanosis. No pain on rectal examination. Tendency to gauntlet-boot type of erythema. Tongue fissured and furred. Impressions: renal calculus; abdominal urinary extravasation; pellagra; toxic delirium.

X-ray Examination (October 16, 1936) following Diodrast: Normal functioning kidneys with normal calyces. Marked distention of small intestine.

Surgical Consultation (October 16, 1936): Tender, distended abdomen. Acute intestinal obstruction. Advised Levine suction, intravenous fluids, transfusion, sedatives, enema.

On October 17, 1936, a Witzel enterostomy and exploratory laparotomy was decided upon. The patient died before operation was begun.

POST-MORTEM EXAMINATION

On opening the peritoneal cavity a small amount of brownish fluid was found. The omentum was loosely adherent to the underlying loops of intestine, and its free edge was hemorrhagic and necrotic. The small intestines were markedly distended with gas and showed a greenish and reddish black discoloration. The loops of the small intestine were loosely matted together, particularly in the lower abdomen where the discoloration was most marked. There was a small amount of fibrinous exudate on the peritoneal surfaces. The large intestine was free of necrosis.

The stomach was distended, containing about 800 cc. of blackish fluid. In the mucosa of the fundus there were numerous irregular superficial ulcers 1 mm. to 8 mm. in diameter.

The small intestines contained a large amount of gas and brownish liquid material. The lining was grayish and necrotic-looking, and the wall was dark colored, as previously described. The necrosis was most marked in the lower ileum, but ceased about 20 cm. above the ileo-cecal junction.

The aorta was explored and the openings of the superior and inferior mesenteric arteries and celiac axis were found to be markedly narrowed and almost obliterated. Exploration of the proximal portion of the superior mesenteric artery revealed great narrowing of the lumen and a thrombus occluding the lumen. Beyond the proximal 1½ cm. the artery appeared practically normal. The inferior mesenteric artery showed narrowing of the lumen of the proximal portion, beyond which the artery appeared normal. The celiac axis was small and the lumen apparently was obliterated. The intima of the aorta near the openings of the



Figure 1. Proximal portion of superior mesenteric artery. Hematoxylin and eosin stain. Dark area in center is fresh thrombus.

superior and inferior mesenteric arteries contained several thick, firm, rough plaques measuring up to about 1 cm. in diameter. On the cut surface, yellowish areas were noted in the depths of these



Figure 2. Proximal portion of superior mesenteric artery. Elastic tissue stain. Dark area in center is fresh thrombus, around which is pale vascular fibrous tissue (old organized and canalized thrombus or possibly thickened intima). At upper right inside the internal elastic lamella is a crescent shaped dark area composed of fibrous tissue containing many elastic fibers (which stain black). This crescent shaped area may be a thickened intima or an older organized thrombus.

plaques, and over the yellowish areas was whitish translucent tissue. The remainder of the aorta showed only mild atherosclerosis (grade I). The coronary arteries showed atherosclerosis, grade I.

The remainder of the examination was essentially negative or showed changes of secondary nature.

MICROSCOPIC EXAMINATION

Sections of the proximal portion of the superior mesenteric artery show occlusion of the lumen (Figs. 1 and 2). In the center there is a fairly fresh thrombus which, however, shows early organization (Fig. 3). Around this fresh thrombus is vascular fibrous tissue probably representing an old organized thrombus or possibly a thickened intima. On one side there is a crescent-shaped area of fibrous tissue inside of the internal elastic lamella. This may be a thickened intima or an older organized thrombus. It is less vascular than the fibrous tissue around the fresh thrombus above mentioned and contains a considerable amount of elastic tissue (Fig. 4). The internal elastic lamella of the artery appears to be thickened, and there is some irregularity or fragmentation of the elastic fibers in the media. Definite lipoid deposits are not seen in the intima and there is no calcification of the intima or media. The fibrous tissue in the crescent-shaped area is fairly cellular and dense, and that around the fresh thrombus is less dense and more vascular.

The lumen of the celiac axis is occluded by vascular fibrous tissue, evidently an old organized thrombus (Fig. 5). The internal and external elastic lamellae are prominent. Lipoid deposits and calcification are absent.

The thick plaques in the intima of the aorta show some of the features of ordinary atherosclerosis (Figs. 6 and 7). There are definite pale areas of lipoid deposition in the depths of the plaques. In one of these pale areas (not shown in the photographs) numerous crystal clefts, probably cholesterin crystal clefts are seen. Scarlet red stains of frozen sections show a large amount of fat in these pale areas. The fibrous tissue in the plaques over the pale lipoid areas is fairly dense and cellular in many areas, and in places more vascular than is usual for an atheromatous plaque. This tissue appears somewhat hyalinized and edematous. There is a thin, fairly fresh, organizing thrombus on the surface of the aortic plaques, shown as a dark zone in the photographs. The presence of the organizing thrombus on the surface, and the cellularity of the fibrous tissue beneath suggest the possibility that the plaques arose as a result of repeated thrombosis followed by fibrous organization. On the other hand these plaques might be regarded as somewhat atypical plaques of atherosclerosis in which fibrosis is a prominent feature. Leary[1] in describing coronary atherosclerosis

[1] Leary, Timothy: Experimental atherosclerosis in the rabbit compared with human (coronary) sclerosis, *Arch. Pathol.* **17**:453-492, 1934.

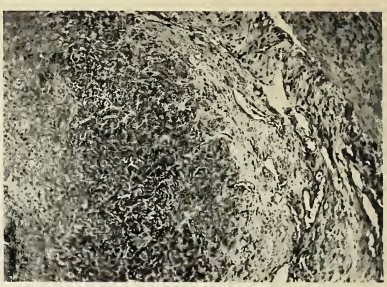


Figure 3. Higher magnification of fresh thrombus in superior mesenteric artery showing early organization. On the right is vascular fibrous tissue (old canalized thrombus?).

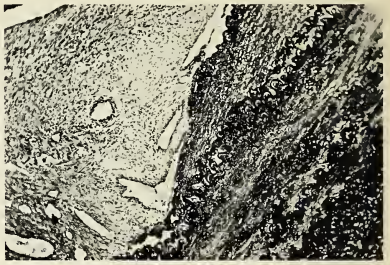


Figure 4. Higher magnification of a portion of section represented in Fig. 2. At left is vascular fibrous tissue (old canalized thrombus?). To the right of center, mostly in upper portion of photograph, is a portion of the crescent shaped area inside internal elastic lamella containing many elastic fibers (thickened intima?). The internal elastic lamella passes obliquely from lower left to upper right.



Figure 5. Celiac axis. Hematoxylin and eosin stain. Lumen occluded by old organized canalized thrombus.

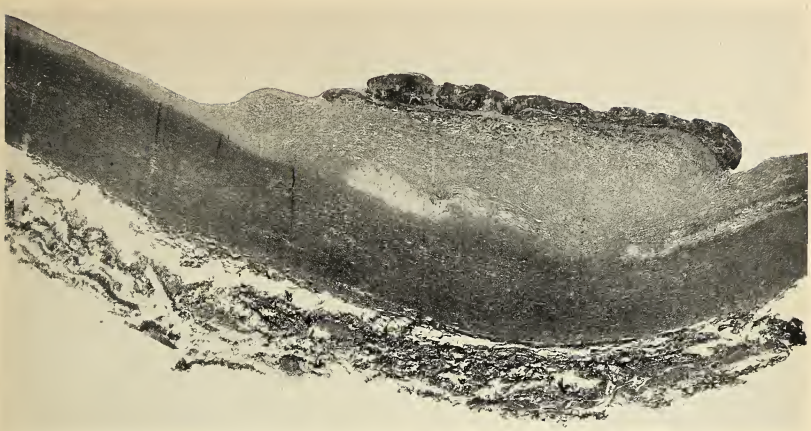


Figure 6. Aorta showing plaque in intima. Note pale lipoid areas in depths of plaque, and dark staining fresh organizing thrombus on surface.

makes the point that in younger people fibrosis of the intima is prominent, whereas, in older people, the characteristic lesion is the accumulation of large collections of lipoid cells with minimal connective tissue support. The sites of lipoid cell accumulation may become necrotic and calcified. This patient was 38 years old. The internal elastic lamella of the aorta is somewhat frayed in places beneath the plaques.

Sections through a small gastric ulcer show it to be superficial and acute. Just beneath the ulcer in the submucosa is seen a fairly large vein occluded by a fresh thrombus.

SUMMARY

A case of severe abdominal pain of several months' duration in a white male, 38 years old, is presented. Evidence of intestinal obstruction finally developed. Post-mortem examination revealed infarction of the small intestine due to occlusive vascular disease affecting the superior mesenteric artery, celiac axis, and inferior mesenteric artery.

COMMENT

This case exemplifies many well-known clinical features of mesenteric thrombosis. By far the most outstanding symptom is that of pain which

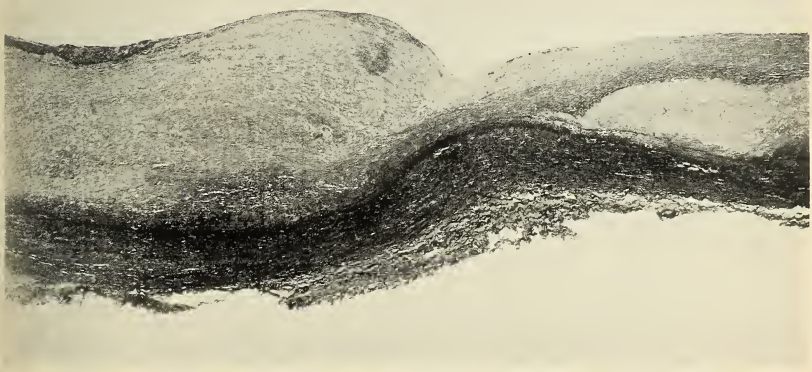


Figure 7. Aorta showing plaques. Large pale lipoid area in plaque on right. Thrombus on surface of plaque on left.

is out of all proportion to the physical findings. Furthermore the radiation and location of the pain does not fit any other clinical picture. As in thrombosis anywhere in the body, the pain is severe, but it is particularly so when the mesenteric vessels, either arterial or venous, are occluded. The pain may be compared to that of an acute hemorrhagic pancreatitis and indeed can only be distinguished from this by the presence of bloody stools in mesenteric thrombosis. Another feature of this pain is the fact that it occurs in characteristic episodes before it finally becomes continuous. Undoubtedly the episodes of pain are due to vasospasm before the occlusion is complete. This is aggravated by increased peristalsis after eating very much as intermittent claudication is brought on by muscular activity in peripheral vascular disease. Obviously when the blood supply is completely shut off, the pain is continuous and excruciating.

The association of a psychosis is unusual unless caused by lesions in the brain or spinal cord due to thrombi or emboli. Arterial thrombosis may have been present in the brain in this case. The brain was not examined.

A second prominent feature of mesenteric thrombosis is the very high leukocyte count which in this case reached 40,000. This is true of any intestinal obstruction, but the high count reaches its maximum when the obstruction is due to mesenteric thrombosis.

Vomiting is usually present and in this case was continuous and of such magnitude that the suction apparatus and Levine tube failed to keep the stomach and duodenum empty.

The many diagnoses listed are easy to understand, because the chief symptom was pain, and this may have been interpreted as due to intestinal obstruction, renal colic, pancreatitis or many other causes. This case was rendered particularly difficult to diagnose because of the absence of any definite causative factor, such as endocarditis, general arteriosclerosis, thromboangiitis obliterans, phlebitis, appendicitis, hepatic disease, syphilis.

The age of the patient is younger than usual; however, mesenteric thrombosis has been reported even in childhood.

The surgeon can only make a diagnosis of an acute abdominal calamity for the relief of which surgery is indicated. A flat plate of the abdomen reveals intestinal obstruction, and this is usually the diagnosis that is made. In the presence of entities which may produce thrombosis the lesion may be suspected, otherwise it usually is not. If these patients can be operated upon early, and if the bowel is not too widely involved, resection may be successfully performed. Recently heparin has been used post-operatively to prevent further thrombosis from occurring. In this patient it is obvious that even if the diagnosis had been made, resection could not have been successful due to the extensive involvement of the bowel.

The clinical picture is clarified by the pathological findings. From the pathological viewpoint the chief interest is in the nature of the vascular lesions.

The presence of thrombosis and fibrosis in the superior mesenteric artery and an old organized thrombus in the celiac axis, without definite lipoid deposits and without calcification, indicates that the lesions are unusual. The organized thrombus occluding the lumen of the celiac axis is well vascularized or canalized. Apparently there was little or no thickening of the intima before thrombosis occurred, as the vascular fibrous tissue (organized thrombus) extends practically to the internal elastic lamella. The internal and external elastic lamellae appear to be considerably thickened. In the superior mesenteric artery, in addition to the fairly fresh organizing thrombus in the lumen, there is fibrous tissue of two kinds inside the internal elastic lamella, namely: a fairly dense, poorly vascularized tissue, containing a fairly large amount of elastic tissue, forming a crescent-shaped area on one side, and a less dense, vascular tissue containing no elastic tissue filling in the remainder of the space within the internal elastic lamella around the fresh thrombus. As suggested previously, the crescent-shaped area may represent a thickened intima, and the less dense vascular tissue, an old organized thrombus. This interpretation would be in keeping with a diagnosis of atherosclerosis in the superior mesenteric artery, but against this diagnosis is the absence of definite lipoid deposits and calcification. An old thromboangiitis obliterans was considered as a possible diagnosis, but while visceral involvement has been described in many cases of thromboangiitis obliterans, this involvement has been only one feature of the disease, the more familiar involvement of the extremities also being present.[2, 3] The most definite evidence in favor of atherosclerosis is found in the intima of the aorta around the mouths of the occluded arteries, where definite plaques containing typical lipoid deposits in their depths are found. There is some fraying of the internal elastic lamella beneath the plaques.

Perhaps this should be regarded as an atypical case of atherosclerosis in a fairly young man with marked fibrous tissue proliferation, slight lipoid accumulation and no calcification.

[2] Cohen, Sidney Slater, and Barron, Maurice E.: Thrombo-angiitis obliterans with special reference to its abdominal manifestations, *New Eng. J. Med.* **214**:1275-1279, 1936.

[3] Averbuck, Samuel H., and Silbert, Samuel: Thromboangiitis obliterans, IX. The cause of death, *Arch. Int. Med.* **54**:436-365, 1934.

Do you know of any patients who have suffered ill effects from the use of drugs containing desiccated thyroid? See Editorial Note on Page 146

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MARCH, 1940

Editorials

AN OLD PROBLEM

The U. S. Public Health Service has for some years past shown a vital interest in the venereal disease problem. With the installation of Dr. Parran as chief surgeon a few years ago, this problem was attacked in no uncertain manner, and it was clear that he meant to do something about a question that long has confronted us—one that still is far from solved.

In cooperation with the American Social Hygiene Association, a field study was made as to the manner of treatment of victims of these socalled social diseases, and some astounding facts were revealed.

In a radio broadcast last January it was officially declared that "venereal disease quackery is on the increase and today constitutes one of the major obstacles to the public health control of syphilis and gonorrhea." It also was stated that the drugstore counter prescribing for these diseases is on the increase and that patent and proprietary medicines are showing an increase in sales. "Men's medical specialists" and the mail order concerns show an increased activity though quack advertising has decreased. This investigation was carried on in a more or less personal manner, direct contacts being made with those who had some form of venereal disease and with those "in the know" about such matters. Thirty-five of the larger cities in twenty-six states were visited and 1,151 drug stores were called upon; sixty-two per cent of the drug stores visited "diagnosed" the diseases and offered treatment though it should be stated that treatment for gonorrhea was most often proffered. Thirty-one per cent made no attempt to diagnose, but suggested that they had bottled remedies for sale. Only seven per cent of these stores refused to make a diagnosis or to sell a remedy. Some thirty different bottled preparations for the treatment of gonorrhea were found on the shelves of these stores, the price range being from one to three dollars. It also was found that six yars ago only fifty-one per cent of drug clerks interviewed admitted counter-prescribing, while in 1939 this had increased to sixty-two per cent. In eighteen of the cities visited, no advertising specialists were found; in the other seventeen, there were forty-four such advertisers who were located and consulted, the investigator posing as a patient.

It was learned that the old advertising scheme of using street directories and hand bills is on the way out, and that the populace is not so gullible in these matters as in former years. The investigators noted that the fee was foremost in the mind of each of the quackish operators, and that however carefully propounded, the question always was, "How much can you pay?" More than one thousand "men on the street" were queried as to what to do for a venereal disease, and sixty-five per cent advised "treat yourself," or "go to a drug store." Only thirty-one per cent suggested consulting a doctor or going to a clinic; three per cent said they did not know what to do about it.

As a result of this study, it is estimated that some *five million* persons apply at drug stores each year for treatment of venereal disease and as was pointed out in the broadcast, "a huge educational task yet remains to teach the general public not only the facts about gonorrhea and syphilis but also the necessity of seeking qualified medical care." Two Indiana cities, Indianapolis and Gary, were included in the investigation though no actual figures covering these communities were used in the broadcast. However, by the law of averages, it is fair to presume that Indiana is an "average state." Thus it is seen that the old problem of what to do with venereal diseases remains with us, and that while it seemed for a time that the wide publicity given the subject would do much to abate the evils connected with the handling of these diseases, advertising and counter-prescribing are again on the increase. Have we fallen down on the program? Have we failed to attack it in the proper manner? These are the things that will have to be worked out.

"DENTISTRY AND GOVERNMENT"

Sane, unemotional, factual is the pamphlet entitled "Dentistry and Government," recently distributed by the National Health Program Committee of the American Dental Association. So closely related are the interests and future of the dental and medical professions, and such a fine job has been done by the national dental organization

in the preparation of this pamhlet, that every physician who is concerned with medical economics will do well to borrow a copy from one of his dentist friends.

The essential value of the pamphlet for the doctor may not lie in its conclusions and recommendations for the formation of national, state, and local dental councils, but rather in its brief, compact, well written statement of the background and historical development of the government's participation in the field of dentistry.

"The evolving social order has been particularly manifest for the past ten years in the affairs of national governments and individuals," the pamphlet states. "There has been so much mention of such terms as socialized dentistry, panel dentistry, compulsory health insurance, state dentistry, adequate dental care, relief dentistry, minimum dental care. that even the informed reader has had considerable difficulty in evaluating their varying shades of meaning. It is to clarify this confusion for the thinking citizen that this pamphlet has been prepared."

And that is exactly what the pamphlet does. In concise, readable, understandable style, it tells of the formation and purposes of the Interdepartmental Committee, the National Health Conference of 1937, the Wagner bill of 1939, the hearings before the Senate sub-committee on Education and Labor of which Senator James E. Murray of Montana serves as chairman. It points out that although the Wagner bill is a subject for consideration during this present session of Congress, on "December 21, 1939, however, President Roosevelt announced a new plan for building small hospitals at federal expense in communities where no hospitals existed," and that according to the press, he, the President, made it clear that as far as he is concerned, he expects the introduction of the hospital building plan to cause the Wagner bill to be sidetracked for the duration of the coming session of Congress at least.

The members of the medical profession are pleased to read the statements from the dentists that, although dentistry "must develop along with the changing social order to maintain and increase its contributions to the public health, it must resist those forces which are hostile to an orderly, evolutionary progress," and that the American Dental Association is unconditionally opposed "to the creation of any system of compulsory health insurance."

The physicians of Indiana, recalling their own Indiana plan of preventive medicine and the recently adopted A.M.A. eight-point positive program, congratulates organized dentistry for its contribution to modern economic literature which for its clarity of conception and its long-range rather than mere stop gap view of the situation, and its non-technical language, may well be termed a masterpiece.

INDISCRIMINATE DRUG SALES

It is well known that the layman can walk into the drug store and, without let or hindrance, purchase drugs that are, to say the least, not conducive to good health. After all the publicity given the matter, one still can purchase compounds containing dinitrophenol, a drug that has a very unhappy effect on the eyes as well as other parts of the body.

Just at the present moment, there is considerable agitation about the indiscriminate sale of the barbiturates which are sold in the majority of states as freely as almost any commodity, yet it is well known that the barbiturates should be used only under the direction of the trained medical man.

The *Journal of the Missouri State Medical Association* selected "Barbituric Acid" as its topic-of-the-month for December and has published seven original articles on the subject together with a timely editorial. The subjects discussed include barbituric acid dermatitis, the sale of barbiturates without prescription, the use of barbiturates in mental hospitals, the side effects of barbiturate sedation, barbiturate addicts, effects of barbiturates on mental health, and a discussion of some other undesirable effects.

Dr. G. Wilse Robinson, Jr., makes it clear that barbiturate addicts are increasing in number. The all too common prolonged use of these drugs as a remedy for nervousness and insomnia are to be blamed for much of this. He points out that "barbituric acid derivatives never have any curative value but are drugs indicated for symptomatic relief."

It is reported that in the St. Louis City Hospital, in 1937, barbiturates ranked second in the causes of acute poisoning handled in that institution. One might well presume that many of these cases were attempts at suicide, thus indicating that the lay public has learned of the effects of this drug. The St. Louis *Star-Times* for September eighteenth carried an extensive editorial on the subject, calling on Missouri authorities to do something toward the regulation of the sale and use of this drug.

Inquiry reveals that some states have such regulations, while most do not, nor does the federal government exercise any marked degree of control thereon. Indiana has no law especially applicable to the situation and druggist friends advise that they are at liberty to sell these preparations willy-nilly.

Certainly these sales should be controlled and, at the same time, it is our opinion that Federal regulation will be found to be necessary ere a satisfactory realization is reached. It hardly is possible that with laws in the individual states any degree of uniformity will be secured, thus making for a confusing state of affairs. Great Britain some time ago prohibited the sale of these drugs without prescriptions, a regulation that has

met with much favor among the medical profession throughout that Empire.

Any measure that will properly restrict the sale of a drug with such potential dangers should be favored and supported.

CIVIL SERVICE EXAMINATIONS

A letter from an official of the Association brings to our attention the subject of Civil Service examinations, particularly the fee allowed in such cases. We say "allowed," which means the fee "suggested" by the Department. In an official communication it is naively stated that "most of the doctors designated by the Civil Service Commission have agreed to accept a fee of two dollars, in consideration of the fact that many appointees are selected for positions in the lower grades, or for part time or intermittent employment which nets them a very small income. Under the circumstances, I am wondering whether, if you have not already agreed to accept this fee, you would be willing to do so." This query is signed by the District Manager of the Commission.

Now, just what does such an examination include? According to our informant, he is expected to answer questions concerning the "heart, lungs, abdomen, hernia, teeth, throat, nervous system, rectum, varicose veins, the feet, and blood pressure, together with questions concerning the possibility of the existence of lues. It takes from one-half hour to one hour for such an examination."

In addition it seems that the examiner is expected to pass on the ability of the applicant to do light or heavy work, as well as to make the tests for vision, color sense, and hearing. Our informant states that many of these applicants are applying for positions on the East Coast, as machinists in the navy yards, hence it would seem that the suggestion that many applicants are considering positions that do not pay so well does not hold.

This same physician also enters a complaint rgearding the fee offered for examinations in some of the welfare work that is going on about the state and cites an instance in which he was asked to make a complete examination for *one dollar!*

The standard fee for life insurance examination, which requires the same meticulous care as do those for Civil Service cases, is five dollars. We do not understand why a similar fee should not be expected in both instances. Much has been said as to the cost of maintaining an office for the practice of medicine. Few physicians have undertaken to estimate the cost-per-patient in this matter. An Indianapolis physician not long ago remarked that his patient cost was something like seventy-six cents. This being true, the man who makes any examination that is in any way a complete one is operating his office at a definite loss. A business man who does not know the cost of his operations is very likely to end in bankruptcy and we know of no reason why the law of averages pertaining to this group should not apply to medical men. It is but a repetition of the old discussion of cut-rate practice, but under a new set of conditions.

We are not attuned to the notion of having *anyone* set the fees for medical examinations of any sort by anyone save the physician himself. Whether it be a governmental agency or a manufacturer or a welfare worker makes little difference in our opinion. It's an old, old statement, but we still believe that "the laborer is worthy of his hire." We continue in the belief that the medical man has the right to fix his own fees in each individual case, knowing as we do that he will "temper the wind." With that in mind we are not in accord with the suggestion from the Civil Service Commission and shall have to agree with the complaining physician.

THE TRAFFIC PROBLEM AGAIN

Final reports of casualties from automotive traffic during 1939 indicate but a slight decrease in the unnecessary toll exacted by automobiles and their traffic. For a time it seemed that the final figures might show a marked let-down, but the holiday toll was sufficient to bring it very near the figure of the preceding year. The New Year holiday alone accounted for a total of 365 violent deaths of which a great majority were due to automotive traffic; 188 of these deaths occurred upon the public highways. Six states—Idaho, Mississippi, North Dakota, Nevada, Rhode Island and Vermont—reported no violent deaths during this period. Our information is to the effect that these states are notable for their enforcement of traffic regulations, and thereby, to our notion, lies the chief solution to the problem of preventing these deaths.

We long have maintained that the enactment of traffic laws does little to reduce the casualty list; strong enforcement of *every* traffic regulation in a given community shortly will bring about a reduction in the number of traffic accidents. As long as a community permits its drivers to operate their cars without driving permits, with improper or no license plates, to ignore preferential streets, and stop lights, and to block pedestrian cross-paths in our streets, just so long will that community have an overplus of traffic casualties. Our city, county and state police must be hyperactive in the control of this traffic and no longer make only occasional arrests as is now so commonly done in many of our communities. Then, too, our courts should cease this almost daily habit of dismissing cases or of suspending sentences; on the other hand, the offender must pay for his mistake and should be told of the provision in the Indiana laws that subsequent offenses will warrant more summary action.

That enforcement serves a very useful purpose is borne out by the experience observed in Kansas City, Missouri, this past year. Ten years ago it was expected that more than a hundred citizens of that city would be killed each year in traffic accidents. Five years ago the police department cracked down on offenders, with the result that in that period there was a reduction of 166 automobile

deaths—in 1939 there were but 32. The judicial department did its share, seeing to it that cases were tried immediately and that *all* offenders were dealt with according to the law. Soon after the campaign opened, every organization in the city "joined up." The newspapers gave hearty support as did the radio stations. Photo-electric cells were installed to provide incontrovertible evidence; the drunkometer was recognized by every jurist in the city, while cars of the "jallopy" type were forbidden the use of the city streets. The "fixing" of tickets became a lost art in that community and the driver who found his car tagged had but one recourse, that of wending his way to the proper court and taking his medicine. Every smash-up was carefully checked, pictures were made and diagrams sketched so that no loophole might be left for a driver's alibi. In short, if one offended, one had to face the music.

The city of Indianapolis is planning a similar program, and that is pleasant information; it is the first city of our state and thus should set an example for other communities to follow. Reckless, careless drivers should be compelled to obey the traffic laws; goodness knows, we have enough of them on our statute books! Some accidents seem to be unavoidable, but these are very few; most accidents are due to utter carelessness, utter disregard for the rights of other motorists. Then comes the problem of the drunken driver. It should not be a problem. Strict enforcement soon will teach the driving public that alcohol and gasoline mixtures, even in slight amounts, "do things" to the brain of the driver. We again refer to a statement we often have made in these columns: the railroad engineer obtains his post only after long apprenticeship on the left side of the engine; before promotion he must pass a very technical examination, plus an oft-repeated complete physical checkup. Nor does an engineer take "one or two beers" before setting forth on his journey, *and his machine operates on two steel rails*, with little likelihood that it will leave those rails!

Yes, automotive casualties can be reduced at least fifty per cent in any one year by the simple expedient of enforcing the traffic laws we already have on our books. Let's take politics out of the problem; let every offender approach the court on his own merits and let every court in the land deal with these offenders just as it would deal with other dangerous defendants, for we believe the reckless, careless, drunken driver is a very dangerous person!

100% MEMBERSHIP FOR 1940

1. Sullivan County—Dr. J. B. Maple, Secretary
2. Whitley County—Park Huffman, Secretary
3. Scott County—J. P. Wilson, Secretary
4. Benton County—Virgil Scheurich, Secretary

Editorial Notes

The new marriage law goes into effect March first. The Committee on Syphilis Control for the Indiana State Medical Association has outlined and recommended a policy for practicing physicians in Indiana to follow. It is published in this issue of THE JOURNAL. Do not fail to read it carefully.

The Indiana University School of Medicine through its Postgraduate Education Committee is sponsoring a postgraduate course in pediatrics for the general practitioner, beginning March 20th and continuing on the following three Wednesdays, March 27, April 3, and April 10. The schedule is published in the advertising pages (page xxiv) in this issue. Look it over.

If you know of patients who have suffered injurious effects from the use of proprietary remedies containing desiccated thyroid, recommended or sold for obesity, or injurious results from ingestion, either on prescription or indiscriminate use, of two grains or less of desiccated thyroid per day, please report such cases to the headquarters office of the Indiana State Medical Association, 1021 Hume Mansur Building, Indianapolis, Indiana.

Now there is something else to worry the mothers of little tots—the possible danger of lead poisoning from the use of metal toy dishes. Rathmell and Smith in *The Journal of the A.M.A.* for January 20, 1940, report a case of this sort in a youngster about two years old. The toy dishes were used for orange juice, the acid from which dissolved a sufficient amount of lead to cause rather serious gastric disturbances some four hours later. It is stated that the dishes were labeled "Aluminum composition."

The December issue of the *Wisconsin Medical Journal* is very properly called "Medical Blue Book." It is a veritable legal guide for Wisconsin physicians for it contains briefs of practically all Wisconsin laws that affect the medical profession. It also has much to say on the subject of office leases, collections, fee splitting, and other interesting topics. The American Medical Association's code is published in full, as are the regulations as to medical licensure in the State of Wisconsin. This very unusual number will afford much pleasure and convenience to the members of the Wisconsin Medical Society.

Quoting from Morris Fishbein: "Today there remains but one of the state medical journals which fails to follow the standards of the various scientific councils of the American Medical Association in its acceptance of drugs, foods and physical devices which are of known composition or construction, and promoted by established claims." Just why this one magazine persists in this policy is unknown; however, we do know that such an attitude causes some loss of prestige for this publication. The Journal is proud of its record in this regard; now in its thirty-third year of publication, our Journal pages never have carried such advertising.

The more conservative lay press continues to show concern over the oft-repeated attempts to create a demand for socialized medicine. The Indianapolis *News*, concluding a recent editorial on this subject, says:

> "The danger in the present situation is that the regimenting plan will be forced upon the country by appeal to the humane instincts of the people. It will be put forward as the way to help indigent sick people, and no one will oppose that purpose. But as a law it will be administered to give control of medicine to the politicians. The people rely on congress to read any socialized medicine bill for its worst possibilities and to vote it down."

The United Press has issued a bulletin to its bureau and division managers concerning the use of stories of "cures" of various sorts and regarding the handling of news of a medical character. Among the comments made in the bulletin is one regarding "cures." It says: "Never call anything a cure, or give publicity to any remedy of any description, without a thorough investigation; this has been our policy for the last twenty years." Then that policy is reinforced by the statement, "Under no circumstances put any story on a leased wire about a remedy. If convinced that the story has merit, overhead it to New York for investigation and consideration there." We always did like the U. P.!

Morris Fishbein, in writing about state medical magazines, makes the observation that "an editor who studies these periodicals will realize that they do not follow any fixed pattern in composition, make-up, or style. They are, indeed, as individual in appearance and in the nature of the material they present as are the states themselves." All of which is true, and that is just why our state journals are interesting—each one reflects what is going on, medically, in *that* state. Each editor, not immediately concerned with what is going on elsewhere, confines his attention and his observations to intrastate affairs. Each state organ has its own personality reflected by its editors and influenced by the editor's intimate contact with his immediate profession.

The annual session of the American Medical Association will be held in New York, June 10 to 14, with official headquarters at the Waldorf-Astoria. Present indications point to a record-breaking attendance and hotel reservations should be made well in advance. Dr. Peter Irving is chairman of the hotel reservations committee and a communication addressed to him at room 1036, 233 Broadway, New York City, will receive immediate attention. *The Journal of the American Medical Association* for December 16, 1939, published a full list of New York hotels. An added interest at this meeting is the fact that the New York World's Fair will operate throughout the summer, giving medical visitors an opportunity to spend some time in that elaborate production.

Resolutions presented by the Medical Society of Virginia's Committee on Medical Economics were adopted at the recent meeting of that society. The resolutions included a proposal concerning hospital care of the indigent and the low income group in which it was pointed out that "the mounting cost of medical care is not primarily due to increased fees received by physicians, but is largely the result of steadily rising expenditures necessary to make available to everyone all the appliances of modern medical science." The resolutions further point out that it is possible "to subsidize these accessories of medicine without seriously disturbing our present system of medical practice." Copies of the Virginia resolutions have been sent to members of our Executive Committee and various special committees. They are well worth consideration.

Volume 1, Number 1 of the *North Carolina Medical Journal* came to our desk on schedule time in January. This latest addition to the long list of state medical magazines shows much promise. The first number is of good size and carries ten original articles and three case reports. The publication is under the direction of an editorial board of seven members with Dr. Wingate M. Johnson, of Winston-Salem, as editor. Dr. Johnson is not a newcomer to the field of medical literature; for many years he contributed a department in *Southern Medicine and Surgery* and he has written many articles of great merit. The magazine is well printed on an excellent quality of paper and presents a pleasing appearance. We welcome this new member of our growing family and feel assured that under the guidance of Wingate Johnson it will assume a responsible place in American medical literature.

In the January fourteenth issue of the Anderson *Sunday Herald*, the editor, William Toner, published an editorial on socialized medicine, and called attention to the pamphlet issued by the National Physicians Committee, saying that the pamphlet is "probably the best argument presented so far against socialized medicine, for it attacks it from an entirely different angle." The final paragraph of the editorial states, "Centralized government which brings on socialized medicine, so the pamphlet says, would certainly retard progress. Research accomplishments would go out the window with freedom. Americans do not want this. Then they should fight against socialized medicine." Such editorial comment is of inestimable value to the medical profession and we sincerely hope that local physicians have expressed their appreciation to Mr. Toner.

Three news stories, each covering similar subjects, came to our attention recently. They had to do with the removal of foreign bodies from the esophagus, trachea, etc. In one, the writer contented himself with a simple news story without the mention of names except that of the patient. In the second, the story was well played up, with the attending physician coming in for a full share of glory. The third really took the blue ribbon; it was, in fact, a humdinger. It was written by a columnist for one of the big city dailies, and he omitted nothing. Dramatic from beginning to end, the story told of the urgent invitation extended to the writer to visit the hospital to see the operation and proceeded to go into full detail in regard to the various steps of the operation, proper garb for the operating room, etc. The attending physicians were given great prominence. There is no doubt that these operations are of interest to the reading public but the items can be made just as interesting without the names of attending physicians.

The thirty-one staff physicians of the Reid Memorial Hospital in Richmond, Indiana, donated medical, surgical, and obstetrical services to the amount of $40,810.50 during the period from September 1, 1938, to September 1, 1939. These figures were seen in a press clipping and when the local county medical society was asked for confirmation, the secretary wrote: "The amount for physicians' services as stated in the clipping is authentic. This amount was arrived at by using the minimum local fee schedule and the fees as allowed by the Ohio Industrial Commission." We wish that similar figures were available for the whole state. Let's do a little supposing. Based on the above figures, the average amount of donated services per physician would be $1,319.69 and *if* these figures could be applied to the whole state, the 4,081 physicians listed in the Indiana section of the last A.M.A. directory would have donated $5,372,501 in services in that year! It is doubtful whether that figure is large enough to cover the actual donations in services of Indiana physicians in any one year.

It is a fact commonly known to physicians that syphilis is frequently a cause of mental disorders, but the lay public is not so well acquainted with this fact. It is likely that many Indiana folk were surprised to learn through the Indiana press a short time ago that 22.7% of all cases admitted to Indiana's Central State Hospital during the last fiscal year had syphilis. This group of patients comes from central Indiana, the territory surrounding Indianapolis. Probably similar figures can be obtained from the other four state institutions. It requires no prolonged mathematics to figure the cost of syphilis to this state in caring for these unfortunates. If all the cases of this disease now existing in Indiana could be tabulated, and if we could but "sell" the fact that syphilis can be cured, there would arise a popular demand that something be done about it, and that this economic waste be stopped at once. We spend hundreds of thousands of dollars each year in welfare work; we spend too little in the prevention of these diseases that help to make welfare work necessary.

Judging from the following letter sent to a resident of an Indiana city by one of our naturopaths, the medical profession has been overlooking a good bet in the matter of treatment of disease. The writer professes, according to his letterhead, to have "complete x-ray service and complete laboratory equipment." Evidently the ethics of his particular non-medical group does not mention the direct solicitation of business by mail. The letter:

Dear Mrs. ——

Are you one of the many unfortunate persons, who are seeking Health the unnatural way, thru operations, red pills, blue pills, serums made from horses and cows, and yet you are ill? If you are—why not let Nature help you?

We Naturopathic physicians have no desire to force Naturopathy on you—yet, we DO want to present our argument to an intellectual class of people, who usually think for themselves. In those parts of the United States where the wealthy people go, seeking health, the Naturopathic profession plays a very important part, in the art of healing.

In Indiana, by law, Naturopathy is the practice of medicine—not serums, made from horses and cows—but, rather, Nature's medicines, roots, herbs, barks, and berries, pure water, electricity, spinal correction and the elimination of toxic poisons, Nature's vitamins, minerals, diet, etc.

As you know, only Nature cures. Why not let Nature take you back to health, assisted by a well-equipped Naturopathic physician. If you desire to learn more about my profession, I would be glad to consult with you, and if you wish, refer you to one of the hundreds, who say they are now well and happy, and glad they learned of Naturopathic healing.

Can you afford to ignore and brush aside these true facts? Decide NOW to choose Nature's way.

Professionally, yours,

——————, N.D.

Nathan Van Etten, of New York City, president-elect of the American Medical Association, in discussing hospitalization affairs as recently proposed by President Roosevelt, makes the following comment: "I believe that medical service to the economic indigent is the problem of the taxpayer. The economic indigent may be defined as one who is unable to provide the necessities of life for himself and his family."

"I believe that medical service to the medical indigent is the problem of the taxpayer. The medical indigent may be defined as one who cannot pay for medical care without sacrificing the necessities of life for himself and family."

Further, he says, "I believe that medical service to other people of low income, who are able to pay for ordinary but not for catastrophic illnesses, should be *shared* by the medical profession and the taxpayer."

In these concise statements is a boiled-down concept of the view of medical relief problems held by most of us. We may be a little late in getting this message before the people of America, but we believe such comment, coming from our official heads, will do much to stem the unjust criticism that has been ours in the past few years.

Again comes a form letter requesting the opinion of physicians in the matter of toilet soap; this time the letter comes from one of the "throw-away" medical magazines. It names several of the popular brands of soap and asks that the physician check the one that he believes most nearly meets the "scientific standards of purity." It is made clear that the signature is not desired—just the endorsement of one brand of soap. Physicians who receive such communications should hark back a few years to the time when one radio advertising slogan was, "Twenty thousand physicians have endorsed this product," and when the endorsers were "paid" for their endorsements with a generous sample of the product. The soap come-on letter offers nothing—not even a bar of one's favorite soap! Such letters, of course, should not be answered. They do the profession no good, and have but one purpose—a cheap method of acquiring an advertising contract. If physicians in Indiana are to answer advertisements and are interested in promoting advertising campaigns, we suggest that they limit such activities to the answering of advertisements regularly appearing in The Journal.

Hollywood has at last come through with a picture that shows a rare insight into the practice of medicine. Edward G. Robinson portrays the life of Paul Ehrlich in "Dr. Ehrlich's Magic Bullet," a Warner Brothers picture. In it is unfolded the life of a man with vision and courage, a doctor who devotes his life in unselfish fashion to the true ideals of research and medicine. A good cross section of German medicine of the latter part of the last century is shown. We meet the great Doctor Koch when he announces the discovery of the tubercle bacillus. We see Ehrlich wreck his private professional life and his health that he may develop stains for bacteria from aniline dyes. We see unfolded the theory of immunity as developed and applied to diphtheria. One of the high points of the picture is a graphic portrayal of the diphtheria epidemic in Germany, and there is a tug at your heart and a tear in your eye when you witness the diphtheria epidemic in the children's ward with Dr. Ehrlich when antitoxin is first administered. Ehrlich continues his search for the magic bullets to conquer disease by experimenting with aniline dyes. One catches the spirit of true research with its disappointments and harrassments from outsiders who control the purse strings. The great discoveries in syphilis are unfolded before us with a simple explanation of the side chain theory. The subject of syphilis is handled on such a high plane that even the most fastidious cannot object. The message is stressed that syphilis is another contagious disease to be conquered. Ehrlich's vindication in the court room is a fitting climax. This picture is good entertainment for the entire family and carries a powerful message without preaching. Any doctor who sees the picture will be struck with the realization that we are just beginning to make use of the great discoveries of the recent past. What a revolution in thinking it must have been when the medical profession was bombarded with rapid fire new discoveries which upset previous concepts of disease!

The latter part of next October will find medical Indiana centered at French Lick Springs Hotel, the occasion being our annual meeting. This year, because of conflicting conventions here and elsewhere, our meeting will be held during the last week in October, probably the most delightful of all times to visit the "foothills of the Cumberlands." The scientific program committee, already active in their work for this session, announces that the program, as yet incomplete, promises more than usual merit. The entertainment features, always a big hit with medical men and their families who attend these conventions, will be replete with about everything that goes to make such a stay a pleasurable one. There is something about French Lick that strongly appeals to us. Its setting, down in the Indiana hills, affords a scenic beauty beyond ordinary comparison; then, too, the fact that the hotel affords superior accommodations for every one of our convention features, accommodations to be had at no other Indiana point, should attract many newcomers among our membership. Again we would remind our folk that French Lick Hotel rates are *not* high. And it is not too early to make your reservation—do it now!

President's Page

THE NATIONAL PHYSICIANS COMMITTEE

Those fortunate physicians who were in a position to attend the sessions of the National Conference on Medical Service held in the Palmer House, Chicago, on February 11th, left the morning session with a new and stimulating viewpoint and the sense of a new and vastly important responsibility.

Dr. Edward H. Cary, past president of the American Medical Association and chairman of the board of trustees of the National Physicians Committee for the Extension of Medical Service, reported on the Wagner National Health Bill, the new Federal Hospital Bill, and generally on trends in Federal legislation. Enactment of a bill providing for the building of hundred-bed hospitals with federal funds is in prospect at this time. However, this bill may be considered to be of minor importance. Dr. Cary pointed out that the real menace was not so much in early enactment of legislation as in the flood of propaganda that is being systematically used to confuse the public and destroy confidence in the effectiveness of medicine and in the practicing physician.

Dr. Cary pointed out that for nearly one hundred years—and most effectively for a period of forty years—organized medicine had been charting the course and on a long range basis planning the activities and spheres of operation that moved American Medicine to a position of world supremacy. Now new economic conditions and a new set of social concepts and controls had created new problems that must be faced. If the pattern of American Medicine is to be retained, adaptations must be made, and if the independence of physicians is to be preserved, the trends toward regimentation must be fought vigorously.

Dr. Cary stated that to meet this need new machinery had to be created quickly—and the National Physicians Committee for the Extension of Medical Service was organized to meet the vitally important emergency need and that the preliminary efforts had been almost spectacular in their effectiveness. It is understood that the initial response from physicians from every state has been most encouraging and far beyond expectations. However, Dr. Cary made it quite plain that the financial support of each and every physician is essential to carry out the program that has been outlined.

I left the Palmer House meeting thoroughly convinced of the merits of the organization and with the conviction that every effort should be made to secure the support of every physician to add strength to this new agency.

If you have not read the "Achilles Heel of American Medicine," you should read it. If you have not had copies of "Priceless Heritage" and the "Minutemen of American Medicine" you should send for them. They fully outline the "why and how," the aims, purposes, and methods of the National Physicians' Committee for the Extension of Medical Service. The address is Suite 207—700 N. Michigan Avenue, Chicago, Ill.

Karl R. Rucksell

NEW MARRIAGE LAW EFFECTIVE MARCH FIRST

REPORT OF THE COMMITTEE FOR SYPHILIS CONTROL OF THE INDIANA STATE MEDICAL ASSOCIATION, WHICH HELD A MEETING IN INDIANAPOLIS ON JANUARY 21, 1940.

The following policy was outlined and recommended:

The attention of the practicing physicians in the state of Indiana is called to Section 2 of House Bill 134, passed in March, 1939, and becoming effective on March 1, 1940: "That the above entitled act be further amended by adding thereto a supplemental section to read as follows: Section 14. (1.) No application for a marriage license shall be accepted by the clerk of the circuit court unless accompanied by or unless there shall have been filed with him a statement or statements signed by a duly licensed physician that each applicant has been given such examination including a standard serological test as may be necessary for the discovery of syphilis made on a day specified in the statement which shall be not more than the thirtieth day prior to that on which the license is applied for, and that in the opinion of the physician the person thereon named is not infected with syphilis or if so affected, is not in the stage of that disease whereby it is communicable at such time."

It is apparent that the task of determining whether or not an individual is infectious is left to the discretion of the examining physician. The Syphilis Control Committee has attempted to lay down certain rules which will form a basis for the determination of infectiousness among applicants. These rules have nothing to do with the question of cure. The object of the law is to prevent transmission of syphilis to the other partner in the union, or to the offspring of this union. Wassermann-fastness, resistant neurosyphilis, cardiovascular syphilis, etc., are considered only in the light of infectiousness.

TYPES OF CASES CONSIDERED

Early Syphilis (Of less than five years duration).

Two types of cases are considered under this heading:

1. That type of case in which a positive serology has never been present, but in which a dark field examination has identified the presence of the disease.

2. The case in which a positive serology has been present from the time of the original diagnosis.

Serologic tests alone are not a satisfactory guide to infectiousness in a case known to have early syphilis and should not be accepted for certification. No person should be considered non-infectious who has not received a recognized, adequate amount of treatment. This treatment should consist of thirty (30) injections of the arsenicals and forty (40) injections of the heavier metals. An individual can be considered worthy of certification where treatment has been continuously given and the patient has been serologically negative on blood and spinal fluid for one year. If spinal fluid and blood are negative at the end of two years and have remained negative for a one-year period, where treatment has been taken irregularly, but the total amount conforms to the above standards, the patient may be considered worthy of certification. In cases of syphilis in which a positive serology has occurred, but in spite of the above amounts of treatment Wassermann-fastness still prevails, certification may be granted on sufficient evidence of the above amount of treatment, wherein a period of three years has elapsed after the original date of the infection.

The committee is of the opinion that both parties to a marriage contract should be informed of the fact that one member is not considered cured and that, therefore, both of them should report yearly for a period of five years for clinical and serologic tests. In addition to this, the wife should report immediately for serologic and clinical observation upon the occurrence of pregnancy.

Late Syphilis (More than 5 years duration).

The opportunity for infectiousness in cases of marriage involving late syphilis is considered less probable than in early syphilis. Here, again, the committee is of the opinion that both parties should be informed of the presence of the infection. If the woman becomes pregnant she should immediately report for serologic and clinical observation.

The committee believes that in preparation for marriage cases of late syphilis should receive twenty (20) injections of the arsenicals and sixty (60) of the heavier metals.

Congenital Syphilis

Wassermann fastness is recognized as notoriously common in cases of congenital syphilis. Where such evidence is presented that a doctor may be assured of the definite proof of the existence of congenital syphilis, the same rules should apply as to those cases of over five years duration. In other words, twenty (20) injections of the arsenicals and sixty (60) of the heavier metals should be used in preparation for marriage. Here, again, the committee feels that the contracting parties should know of the presence of the disease in one or the other and that yearly physical examinations and blood tests should be advised. In addition, all cases of pregnancies should report immediately for treatment to protect the offspring.

Respectfully submitted,

COMMITTEE FOR SYPHILIS CONTROL
F. R. N. Carter, M.D., Chairman
Minor Miller, M.D.
L. G. Montgomery, M.D.
W. P. Morton, M.D.
E. O. Nay, M.D.
B. W. Rhamy, M.D.

MATERNITY STANDARDS INCLUDE PLANS FOR UNMARRIED MOTHERS*

The development of standards for homes and hospitals giving maternity care has required the close cooperation of the Indiana State Board of Health, the Indiana Department of Public Welfare and the Indiana State Medical Association. The adoption of the standards by the State Board of Public Welfare, as a guide for the improvement of care and service for mothers and babies, has meant the continued cooperation of these state agencies and the cooperation of local groups and persons.

Adequate services to mothers and babies at the local hospital requires an understanding between the hospital, the doctors and the county department of public welfare or private social agencies as to the responsibility of each in the plan for the individual case. In the main, the service to a pregnant mother is medical, but there are certain situations in which social service may be needed. This is particularly true in the cases of unmarried mothers who plan to take no responsibility for the care of their babies and want to arrange for placement in foster homes for adoption.

The plan for social service, as brought out in the standards for maternity homes and maternity hospitals, follows:

"CHILD PLACING

"a. A child shall not be placed for adoption by anyone who is not authorized to do child placing by the State Department of Public Welfare. The county departments of public welfare and licensed child caring and child placing agencies will cooperate with physicians and other persons in making plans for unmarried mothers and babies and, where necessary, will take the responsibility for placing children in foster homes which have been approved by the State Department of Public Welfare.

"b. No maternity home or hospital licensed by the State Department of Public Welfare is permitted to advertise children for adoption or to be a party to such advertisement.
No maternity home or hospital is permitted to advertise directly or indirectly for the care of unmarried mothers with the view of helping them dispose of their babies for adoption.

"c. Social service should be available for every unmarried mother admitted to a maternity home or hospital either through the county departments of public welfare or through a qualified social agency in the community. This service will include a plan for the mother and the baby based on a real understanding of needs, the mother's wishes in the matter, the program which she has chosen for herself and the facilities available for her and the child."

In the past many doctors, hospital staffs, rooming-house keepers and others have aided in the plans of placing babies for adoption, frequently when the baby was not more than two weeks old. However, placement of children by anyone not licensed to do this work is against the law and subject to a fine of not more than $300 or imprisonment for not more than one year, or both. With the organization and development of county departments of public welfare, as well as private agencies for the care of children in Indiana, there is no reason at the present time for the practice of placing babies without a license.

The procedure recognized and advised by all child welfare authorities for the placement of babies is, briefly, this: The mother should have plenty of time, after the birth of the child, to make her decision about the care of the child, based upon a knowledge of all possible resources. If the child is to be placed for adoption, there should be careful inquiry into the family history of the parents to learn of the inheritance of the child. There should be a period of observation of the growth and development of the child, with psychological tests if possible, to understand the abilities of the individual. There should be sufficient knowledge about the foster parents, their interests and abilities, so that only those foster parents who could most nearly meet the needs of the individual child would be considered. After the placement of the child in the foster home, he should remain there for at least one year, under supervision, before adoption is completed.

In order to secure information about the placement of children from hospitals and to assist in the acceptance of the child placing standards in the state, a conference was held in May, 1939, with the administrator, physicians and social workers of the William H. Coleman Hospital of Indiana University Hospitals. It was learned that the placement of babies had been a problem to the hospital staff. Mothers came to this hospital from many parts of the state. In case the mother did not want to take the child home with her but insisted that the child be placed for adoption, there was the need of immediate plans for the child when the mother left the hospital. Through this conference, arrangements were made for social service for all cases of unmarried mothers or of married mothers who plan to give their babies for adoption or who are in need of service or financial assistance.

The physicians and social worker at the hospital participated in working out a plan whereby the Marion County Department of Public Welfare will give service to mothers living in Marion County, and the Children's Bureau of the Indianapolis Orphan Asylum will provide service for mothers living outside Marion County, if there is a reason why the case should not be referred to the local county department of public welfare. The social service department of the hospital will be notified as soon as it is known that the mother is considering the

* Reprinted from *Public Welfare in Indiana*, December, 1939.

adoption of her baby or is concerned about plans for her baby. The social service department will then refer the case, as early as possible, to the Marion County Department of Public Welfare or to the Children's Bureau, sending to the agency any information the hospital may have concerning the mother. The successful operation of this plan requires close cooperation between the hospital staff, the doctors, the social service department and the local child caring agencies.

A recent interesting example of cooperation between the doctors and social workers was the institute for social workers which the Indiana State Medical Association gave at the State Conference on Social Work on November 1 and 2. The suggestion was made by the medical group that a committee of doctors and social workers meet to discuss the training needs which would result in a better understanding and a better working basis between the two professions.

THE INDIANA FOOD, DRUG AND COSMETIC ACT

VERNE K. HARVEY, M.D., Secretary,
Indiana State Board of Health

On March sixth of this year the Indiana Food, Drug and Cosmetic Act becomes effective. Approximately twelve months ago the act was passed by the Indiana legislature and with the enactment certain sections of the act became effective. Among the drug sections which have been in effect for nearly a year are the following:

(1) Section 18 (j) which provides that a drug or device shall be deemed to be misbranded if it is dangerous to health when used in the dosage, or with the frequency or duration prescribed, recommended, or suggested in the labeling thereof.

(2) Section 20 which provides that no person shall introduce or deliver for introduction in intrastate commerce any new drug unless it has been tested and approved by either the U. S. Food and Drug Administration or the State Board of Health. The act, however, provides that drugs, that is, drugs subject to either or both of the above mentioned sections, are exempted from the requirement of these sections if they are dispensed on a written prescription signed by a physician, dentist or veterinarian (except a drug dispensed in the course of the conduct of a business of dispensing drugs pursuant to diagnosis by mail) if such physician, dentist or veterinarian is licensed by law to administer such drug, and such drug bears a label containing the name and place of business of the dispenser, the serial number and date of such prescription and the name of such physician, dentist or veterinarian.

In other words these particular sections do not include the physician's prescription where it is properly signed and carries the special prescription label. If this exemption had not been made many prescriptions would technically be new drugs which would mean that they would have to be tested and approved before being sold. Likewise many drugs may have been misbranded under Section 18 (j) because for instance in certain cases of illness an overdose of a drug might be required which might if taken by anyone else prove dangerous to health.

The Board of Health is charged with the administration of the act in all cases where it is applicable. The administration includes obtaining official samples by the Board of Health representative, submitting the samples to the laboratory where the analysis is made and finally taking the proper action. Generally the samples may be obtained from one of three sources: the manufacturer, if located in Indiana, the wholesaler, retailer or dispensing physician. If the manufacturer is located in Indiana, we obtain samples there; if, however, the manufacturer is outside the state we must obtain samples from the person to whom he has sold his products. Many manufacturers sell to the wholesale houses while others sell direct to the retailer and many sell only to the dispensing physicians. Therefore, it becomes our duty in certain instances to obtain samples from the retailer and dispensing physician.

The new drug section will eliminate new products which have not been tested and proved as safe for use, but we must also see to it that the many potent drugs and compounds sold are not misbranded to the extent that they may be dangerous in the dosage prescribed or recommended on the label.

It is our sincere desire to rid Indiana of all adulterated and misbranded drugs, especially those which are dangerously adulterated and misbranded. The Board of Health can only accomplish this end if it has the wholehearted cooperation of the professional men who may have innocently purchased such products and thus have them in their possession.

A.M.A. CONVENTION, NEW YORK,
JUNE 10-14, 1940

THE EXECUTIVE SECRETARIES SAY—

(From the Secretaries' Conference)

ROLLEN WATERSON, EXECUTIVE SECRETARY

Lake County Medical Society
Hammond-Gary

When the employment of a full-time lay secretary is first proposed to a county medical society, the question asked by a majority of its members is the obvious, practical one which Mr. Waddell and I thought you would expect to have answered this afternoon: "How can the full-time secretary bring us a profit on our investment in him?"

In answering this question for you, Mr. Waddell and I will recognize two kinds of profits: first, the immediate, tangible profits in dollars and cents earned for you, and, second, the less tangible but, I believe, the far greater profits resulting from organization solidarity and consequent strength to resist invasion; good relations with the public; a general improvement in the quality of medical practice as a result of postgraduate education; improved hospital conditions and hospital relations; new public health projects designed to more strongly intrench private practice; and public education, which should not be confused with public relations. Mr. Waddell will discuss these less tangible returns from an investment in a full-time secretary, and I'll make my report on money profits on their investment that are accruing to physicians in Lake County during my first year in their employ.

The care of the indigent sick in Lake County has, for years, been the biggest chunk of political plunder in medical practice in the state. In 1938 a few politically competent physicians were paid nearly a quarter of a million dollars for this work by the county. You have heard the repercussions: political intrigue, bribery, indictments, and public scandal. And there's more to come, because our grand jury is still adding exciting but yet unpublished chapters to the colorful history of that golden age of pauperism. Under the system, indigent patients, of whom we had many thousands, were, of course, denied their right of free choice of physician, and our politically unfortunate members, who were the vast majority, saw family after family, temporarily indigent, herded into the offices of physicians who had never seen them before, many never to return to their family doctors.

A complete discussion of the details of the campaign to correct this situation would require more time than the total we have this afternoon. It is enough to say that the indigent sick in Lake County are now given a free choice of physician and that, by reason of what we call our "referral system," about which you read in the *Journal of the American Medical Association*, the County Medical Society itself takes full charge of medical relief in most of our cities. The profession has redeemed itself in the eyes of the taxpayers by reducing to half the cost of the care of the indigent sick. In North township alone more than $60,000 a year in county checks is being distributed among physicians who formerly treated their indigent families without compensation, or saw them go to the politically favored physician. Here is a direct return of over 2,000% on the investment these physicians made in an executive secretary, to say nothing of the value for the future in being able to keep one's practice intact regardless of depressions and politicians!

One of the time-honored bugaboos of the medical profession has been its dilemma regarding a proper means of placing the business side of the practice of medicine on a business-like basis without approaching commercialism. The extermination of the medical dead-beat, the unfairness of the high fees physicians have to charge 60% of their patients because 40% do not pay their bills, and the mechanical means of making medical care available to all the people were the problems. In Lake County the executive secretary has been charged with the responsibility for the solution of these problems. Here is what has been done:

Two "Medical Business Offices" have been opened, one in Gary, to serve that city, Hobart, Crown Point and Lowell; and another in Hammond, to serve that city, Whiting, East Chicago, Griffith and Munster. In a recent radio talk, we explained the existence of these offices as follows: "Under the name 'Medical Business Office' you will find written this line: 'Medical Care for All the People.' The plan for the business offices is very simple. If you need medical care for which you have not presented yourself to a physician because you are unable to pay him, just go to your family doctor and tell him of your condition—both physical and financial. You'll be surprised how easily everything you may have been worrying about will be worked out. The physician will probably send you to the Medical Business Office for the post payment of the cost of the operation or other services, and you will pay just as so many are paying today for automobiles and radios and furniture—on the installment plan. If the physician's fee is more than you can afford to pay over a reasonable period of time without depriving yourself and your family of other necessities, then the doctor will be requested to reduce his fee to an amount you can reasonably be expected to pay, regardless of how little that may be.

"To the ethical physician, reward or financial gain is a subordinate consideration. Note, however, that it is a consideration. The medical profession could not survive if society could not agree that, measured by the services rendered, 'the laborer is worthy of his hire.' Good medical service could not be expected unless society appreciates the value of such service sufficiently to attract and reward properly the type of man who can and will give good service. Professionally and traditionally,

the physician expects to render services to the poor without adequate compensation, but he must protect both you and himself from those who are able to pay, and don't. If he doesn't, it becomes necessary for him to charge a higher price for his services from those who do pay, which would be an injustice to the honest, paying patients. By preventing abuse of charity and by improving collections from those well able to pay, physicians are able to charge more uniformly for their services. But the physician finds himself without sufficient time or proper facilities for the accomplishment of these things, so medical credit rating and collection services are made available to him by the Business Offices.

"Physicians and dentists, both of whom are concerned with the granting of credit to new patients, by consulting the Business Offices, may find that the prospective patient already owes several physicians. The physician is then justified in withholding credit. Only the patient who finds it easier to change physicians than to pay his bill is affected. Patients who are really unable to pay the physician do not need to shop around and run up bills with several physicians, and patients who are worthy of credit are benefited by their listings with the Business Offices as good credit risks."

Thus, these offices not only handle credits and collections for physicians, they not only exist as a background for the public relations committee's guarantee of medical care for all the people, but they are creating a public consciousness of the necessity for prompt payment for professional services, and they have reduced credit losses generally for our members. We may collect, in actual money, not more than $50,000 to $70,000 during 1940 for physicians in Lake County, but the very existence of the offices, and the work they have been doing, is causing many who have not been in the habit of doing so, to pay their medical bills promptly.

Here, again, as on the relief work, if nothing else had been done by the executive secretary than the setting up, staffing and supervising of these business offices, our members would have realized a handsome profit on their investment in a full-time business executive.

We are now working on an immunization program, handled through our public health departments, which have been brought to a closer cooperation than ever before with physicians in private practice. This program, itself, will pay many times over the additional dues required for the care and feeding of an executive secretary. Briefly, the plan is for the various public health departments to send notices to parents six months after the birth of each child in Lake County. These notices instruct parents to take their children, immediately, to their family physicians for immunization against whooping cough, diphtheria, and smallpox. When that has been done, the family physician reports the fact to the health department. Where it is not done, follow-ups will be made by the health departments. Through the plan, most of our children should be immunized before they reach school age, and, thus, throw back into private practice another big piece of work, about 90% of which has been done by school physicians or public health officers at the expense of the taxpayers. Besides being a valuable public health measure, a good many thousands of dollars will be sent to our membership, and the public health departments and school physicians will have taken their proper place in the responsibility for communicable disease: They will see that the immunization is done, but it will be done in private practice.

Reporting for Lake County some of our other accomplishments for the first year with a full-time secretary, which can only be mentioned and not discussed, are the perfection of an organization that is well equipped to meet the problems of the future; the divorce, for the most part, of medicine and politics, and the realization that, where politics interferes with a free choice of physician and prevents the delivery of an honest and adequate medical care, organized medicine is well equipped to deal with the situation; a great deal of public relations and public education work, including two weekly radio broadcasts, (WIND, Gary, and WWAE, Hammond), a close contact with the press, the organization of a Speaker's Bureau, exhibits at the county fair, films reaching more than 70,000 people in our leading theatres; a Syphilis Survey, that itself paid more than $5,000 to physicians in private practice for treatment and increased the number of cases under treatment from less than 500 to more than 3,000; a great deal of activity in Child Welfare; the publication of our Lake County Medical *News*, which pays a profit from advertising each month; the establishment of a Society Blood Group Registry; the groundwork for a comprehensive plan for improved industrial relations; careful attention to labor relations; the elimination of some, at least, of our irregular physicians, and the prosecution of abortionists; postgraduate education plans which have been put into work with an enthusiastic reaction to our first meeting in 1940; close contacts with service clubs, legislators, governmental departments, P.-T. A. groups, schools, Red Cross, Boy and Girl Scouts, and many other organizations, etc., almost ad infinitum.

May I say in conclusion that, from the standpoint of immediate profits, all of the larger county societies that do not have competent full-time secretaries are losing money. Their problems may not be those of Lake County, but, whatever they are, they'll find a quicker and better solution in the hands of a man whose *only* work it is to solve them. Physicians in Lake County paid between $5,000 and $6,000 more in dues during 1939 than they did in 1938. I have been able to return from 20 to 30 times that much to them during the same year, and we have merely laid the *foundation* for what we will build in the future.

PAUL R. WADDELL, EXECUTIVE SECRETARY
St. Joseph County Medical Society
SOUTH BEND

Mr. Waterson has pointed out the cash return from the employment of an executive secretary. It is well to remember that the immediate object of any society program is not to make money. Medicine enters into economics and medicine enters into business in financing medical accounts and treating the indigent for a reduced fee. But in both these undertakings the profession's immediate object is not financial gain—it is to solve those problems which endanger the quality of medical service and the freedom of the profession.

Medicine has been singled out by government as the "economic royalist" of professions; it has been challenged by government for what is termed its "lack of interest in medical care for all." The political promise of two free doctors to every ache has even the healthy man anticipating his symptoms.

Perhaps your most concrete evidence to the outside public that you are interested in solving their medical problems is the employment of an executive secretary. The public in St. Joseph County can no longer say: "Medicine is not interested in my needs." We tell them weekly in the newspaper and on the radio: "If you need medical care but feel you can't afford it, come to our headquarter's office and we will obtain it for you without financial burden." We have a plan for every income, and even a plan for no income. We are teaching the public that medicine is a go-giver in an age of go-getters.

Our Medical Service Bureau will return a financial profit to the doctors in St. Joseph County. But its chief object is not profit—its chief object is to foster a better physician-patient relationship, and to make medical care available to all.

Our Telephone Exchange makes the physician more accessible to his patients; our magazine helps the physician to be a more active and better informed member of his society.

I think it was Mark Twain who said: "It's not what a man doesn't know that hurts him. It's what he thinks he knows but doesn't know." The public in St. Joseph County can no longer say: "Don't blame us for believing propaganda from the other side. Medicine has failed to tell us its side of the story." Every club, every group and every organization in the county has in its files a list of our doctors who are eager to address them, and a list of the subjects we have available for talks. On a week's notice our men will address any group.

Thus, by constantly reminding lay groups that we want to share our knowledge with them, medicine has multiplied its opportunities to speak for itself. Within the Society the Speakers' Bureau serves another purpose, in giving the doctor the incentive to master his materials, and the technique of public address. He is a better read, a better informed, and a more able member of his society.

Each week a member of our Society gives a 15 minute radio talk on preventive medicine and medical progress in controlling disease. This, like the Speakers' Bureau, affords the physician an opportunity to share his knowledge and his viewpoint with the public. Special emphasis is given to periodic health check-ups, immunization, quacks, how to choose a physician, self-medication, patent medicines, free choice of physician, etc.

It is worthy of note that at no time since St. Joseph County has employed an executive secretary has medicine or any individual doctor been misrepresented or misquoted in the press. The press has been patiently and thoroughly educated to come to us for correct medical information. We have found it profitable to interest and to educate one or more reporters in medical news. This has resulted in a satisfactory handling of society stories, and an accurate representation of the society in the press. A central headquarter's office thus makes it possible for a Society to control its own news sources. This control is essential for it is frequently as important to keep a story out of the newspapers as it is to get one in.

To make the doctor's assistant more valuable to him in her office role, a four-weeks evening course in Medical Economics for Doctors' Secretaries was conducted. A credit expert lectured on the extension of medical credit and the legal aspects of collections. The social and economic problems related to modern medicine were also discussed.

Perhaps the most valuable return that the executive secretary has been able to make to the St. Joseph County Medical Society is the achievement of a functional, closely-knit, cooperative organization. Lacking unity of purpose, a society is voiceless, clumsy and ineffective. Without the all-important organization, unity and coherence of purpose cannot be achieved.

We have been at pains to educate each man to an integrated conception of his relationship to his fellows and to the group. The individual no longer stands selfishly alone. What he does for the good of his patients he does for the good of his profession. The physician in St. Joseph County is no longer merely an operator—he is first and last a cooperator.

This is the highest achievement of an executive secretary—to mould from a multiplicity of men and personalities a single mind, a united front, and an effective organization. In organization we have achieved a new security and a greater strength to fight where and when we have to—to deal telling blows to the forces that would destroy us—and, in each victory, to make the lasting peace that favors organized medicine.

In our public relations program we have not been content with seeing the doctor's name in print. Public relations neither begin nor end with successful journalism. Before medicine can ask rela-

tionship with the public, it must first examine its own conscience to ascertain what relations it maintains with its own members. If relations within a society are bad, relations outside cannot be good. We can't cure a face cancer by putting on a mask.

Therefore, we have fostered a more harmonious relationship between the members of the profession.

We have, so far as possible, cleaned our house.

We have made medical care available to all and given free choice of physician regardless of ability to pay.

We have re-emphasized the importance of group thinking and group action—teaching the doctor to think not of financial gain, but to consider the total effects of his actions on the profession.

Our accomplishments have been many in other directions. We have established a cancer control program, a food handlers' survey, and an immunization program. We have laid a foundation for working with the South Bend Dental Society. We have a fracture project, a post graduate education, and an industrial relations campaign in motion. We have enlarged the Society's liaison work to include every organization in the county. We are planning every step, we are acting with an economy of motion and a maximum of results. We are working for *you*.

Perhaps, at last, the single characteristic which best identifies the society with a full time secretary is its ability to get things done as organized medicine can do a job.

CORONARY OCCLUSION—LYONS

(*Continued from page* 136)

pulse 64, regular, but of very poor quality; the heart sounds were sharp and clicking in character but no friction rub was audible. The urine was free from sugar. A pronounced oliguria also developed in this patient. An electrocardiogram at 10 A. M., December 4, 1939, (Plate III, *B*) revealed acute coronary occlusion.

Morphine as required, intravenous glucose once daily for three days and glucophylline gr. 1½ q. 3 hr. were the only medications.

The subsequent course has been satisfactory and uneventful. On January 1, 1940, the blood pressure was 108/80; pulse 80, regular; heart sounds more normal with no murmurs; Hbg. 85%; R.B.C. 4,690,000; W.B.C. 7,000.

Typical sections of the series of electrocardiograms are given in Plate III.

POSTGRADUATE COURSE IN PEDIATRICS
See Page XXIV

POSTGRADUATE COURSE IN OBSTETRICS

Sponsored by the Hendricks and Boone County Medical Societies in Cooperation with Bureau of Maternal and Child Health of Indiana State Board of Health

Note: The first three meetings will be held at Crawley's Hall on the northeast corner of the square in Danville, on Thursdays, February 29, March 7, and March 14. The last three meetings will be held at the Witham Memorial Hospital, Lebanon, on Thursdays, March 21, March 28, and April 4. All meetings will begin with dinner at 6:00 P. M.

First Meeting—Danville—Thursday, February 29

1. Antenatal Care
2. The Mechanism of Delivery
 (With motion pictures)
3. Postpartum Care

Second Meeting—Danville—Thursday, March 7

1. Abortion and Ectopic Pregnancy
2. Postpartum Hemorrhage
 (With motion pictures)
3. Placenta Previa and Abruptio Placenta

Third Meeting—Danville—Thursday, March 14

1. Indications for the Use of Forceps
2. Forceps
 (With motion pictures)
3. Posterior Positions

Fourth Meeting—Lebanon—Thursday, March 21

1. Toxemias of Pregnancy
2. Eclampsia
 (With motion pictures)
3. Hyperemesis Gravidarum

Fifth Meeting—Lebanon—Thursday, March 28

1. Management of Labor
2. Episiotomy and Repair
 (With motion pictures)
3. Induction of Labor

Sixth Meeting—Lebanon—Thursday, April 4

1. Cesarean Section
2. Low Cervical Cesarean Section
 (With motion pictures)
3. Puerperal Infection

These courses will be conducted by Dr. Carl P. Huber, Resident Advisory and Research Director in Obstetrics and Gynecology, Indiana University School of Medicine.

Similar courses are available for individual counties or groups of counties. Inquiries may be addressed to Dr. Huber or to the Committee on Medical Education and Hospitals, Indiana State Medical Association, 1021 Hume Mansur Building, Indianapolis, Indiana.

UNDER THE CAPITOL DOME

Five applicants for licenses to practice medicine in Indiana under provisions of a reciprocal agreement with Illinois took their required examination last month at the Indiana University hospitals, Miss Ruth V. Kirk, secretary of the State Board of Medical Registration and Examination, announced.

NEW MARRIAGE LAW

Indiana's new marriage law requiring a physical examination and a serological test for syphilis by state-approved laboratories of all couples seeking marriage licenses goes into effect March 1.

Dr. Verne K. Harvey, secretary of the Indiana State Board of Health, announced that lists of approved laboratories have been sent to county clerks, local health officers, and secretaries of county medical societies. Physicians are asked to consult these officials to obtain information concerning laboratories to which they can send blood samples of persons coming to them for premarital tests.

New specimen cards also have been prepared by the health board and have been distributed to local health officers. Use of these new cards, which may be obtained from the local health officials, was urged by Dr. Harvey.

All other necessary forms and certificates have been distributed to the county clerks, and others. Dr. Harvey explained, however, that physicians will not have to keep on hand special forms to fill out in connection with the tests because these forms will be sent to the examining physician by the laboratories which make the blood tests.

Here is the procedure:

1. The applicant for a marriage license visits his or her physician, several days or weeks in advance of the marriage date, and the doctor takes a blood specimen and does a physical examination.

2. The physician mails the container and specimen card to an approved laboratory or the laboratory of the State Board of Health, as the case may be.

3. The laboratory mails a confidential report of the outcome of the test to the physician. This report is then mailed to the Indiana State Board of Health by the physician and the report is held in confidential files. Using another form, the laboratory sends the physician a statement that the blood test has been completed. If the applicant is found free from communicable syphilis as confirmed by the blood test, the physician signs the lower half of the form and issues it to the applicant who must sign it in presence of the physician.

4. In event syphilis in communicable state is shown in the test, the applicant is required to wait until the physician can certify that he or she is not infected or "if infected, not in the communicable state."

5. Applicants, both men and women, for marriage licenses must present their health certificate (form P.M. 1) signed by the physician, to the county clerks before they can be issued a license. The result of the blood test is not recorded on this certificate.

Dr. Harvey said that no laboratories outside Indiana will be approved, excepting the laboratories of state health departments. Test reports from any state health department will be accepted.

Applicants for marriage licenses, physicians, laboratory representatives, or public officials who misrepresent facts in connection with obtaining or issuance of the licenses are liable to fines of not more than $100 and imprisonment not to exceed six months, the law sets out. It was pointed out that the Indiana law is unique in that it requires use of the United States mails in conducting the blood tests. This, in the opinion of attorneys, makes violators subject to Federal court procedure on charges of using the mails to defraud.

Although most blood tests will be made by private, approved laboratories, the State Board of Health will make the tests, free of charge, for all persons who apply through their physicians for this service, when the circumstances of the blood specimen examination are such that the physician believes it should be made without charge.

The law creates an automatic "waiting period" of three or four days before the marriage can be performed, since at least that much time will be required for the examination and report on blood tests. A requirement of the law is that the health certificates must be dated within 30 days of the application for a marriage license, and the marriage licenses, in turn, will be effective for only 60 days after their issuance. Previously there was no time limit on a marriage license.

PHYSICAL HANDICAPS NOTED IN APPLICANTS FOR DRIVER'S LICENSE

Examinations of prospective Indiana automobile drivers conducted last year by the Bureau of Motor Vehicles revealed a considerable amount of physical handicaps among the applicants for drivers' licenses, it was shown by a report issued by Frank Finney, director of the bureau.

Of the 161,624 examinations conducted by the bureau in 1939, there were 142,319 approved and licensed, while 10,025 persons were found who were entitled only to restricted licenses. This latter group had some physical handicap that impaired their driving ability.

Those 10,025 persons were granted "restricted" licenses, permitting them to drive only under certain provisions; ninety per cent of them were required to wear glasses while operating a motor vehicle; the majority of the remaining ten per

cent had defective hearing and were required to compensate for their defective hearing by appropriate equipment, such as side mirrors, etc.

Most of those required to wear glasses were not aware of their defective eyesight before they took the driver's examination, Mr. Finney said.

Policy of the department is to turn down defective applicants, but to give them an opportunity for a re-examination. The same applies to persons failing in the driving or traffic law tests. During the year a total of 11,502 persons were rejected on their first application. Defective eyesight caused 3,144 rejections, physical defects, 172. Failure to pass driving tests, or lack of knowledge of traffic laws, resulted in the remainder of the failures.

As a result of re-examinations, only 35 were turned down for physical defects, and 179 for defective eyesight. There were 3,699 persons who, after failing on the first test, probably concluded that they were unable to qualify finally as competent and safe drivers and did not request re-examinations.

ABSTRACTS

ACCIDENTS TO BLOOD VESSELS OF BRAIN RARELY CAUSE SUDDEN DEATH

Sudden death (within two hours) from accidents to the blood vessels of the brain is the exception rather than the rule, Hugh Page Newbill, M.D., New Orleans, declares in *The Journal of the American Medical Association* for Jan. 20.

Interference with the circulatory system of the brain due to such accidents may be caused by hemorrhage, the formation of a blood clot in a blood vessel of the brain (thrombus) or a blood clot formed elsewhere in the body and conveyed to the brain (embolus). In either type of blood clot, circulation is interfered with or perhaps completely cut off from a certain part of the brain. In the 296 cases reviewed, Dr. Newbill found that only one sudden death due to an accident to the blood vessels of the brain occurred in less than one hour after the onset of symptoms.

Hemorrhage is more apt to be responsible if death occurs within twenty-four hours of the onset of symptoms, while the formation of a blood clot is far more common in patients surviving for more than one month.

The average survival period after thrombus formation is approximately fifteen times as long as after hemorrhage or an embolus.

In the author's patients there was a distinct difference in the survival periods of the white (105.5 days) and the Negro patients (64.8 days). This difference was confined mainly to the patients with blood clots.

There was an equally distinct survival difference between males (57.3 days) and females (129.1 days).

IF YOU HAVE NOT PAID
YOUR DUES, YOU ARE
DELINQUENT **NOW.**

Deaths

John B. Berteling, M.D., South Bend, died February tenth, after a long illness. Dr. Berteling was eighty years old. He was a past president of the Indiana State Medical Association, having served in that office in 1903. He was city health officer under three mayors. Through his efforts in that office, South Bend obtained a model milk regulation ordinance.

Dr. Berteling graduated from the University of Notre Dame, and in 1883 he graduated from Miami Medical College, Cincinnati. He practiced in Cincinnati until 1888 when he went to South Bend where he was attending physician at the University of Notre Dame and St. Mary's College and professor of anatomy and physiology at the university. He served in that capacity for twenty-two years while conducting his private surgical practice in South Bend. He served two terms as president of the St. Joseph County Medical Society, and was a Fellow of the American College of Surgeons and of the American Medical Association, and was an honorary member of the St. Joseph County Medical Society and the Indiana State Medical Association.

Joseph M. Byler, M.D., of Warsaw, died January twenty-fourth, aged ninety-two years. Dr. Byler had practiced in Kosciusko county since 1852. He graduated from the Hahnemann Medical College and Hospital, Chicago, in 1876.

John T. Kendall, M.D., of Argos, died January thirtieth, in a hospital in Plymouth. Dr. Kendall was seventy-five years old. He was a graduate of the Hospital Medical College of Evansville in 1885 and had practiced in Argos for nearly fifty years.

James Allen Clevenger, M.D., of Garrett, died at Fort Lauderdale, Florida, January twenty-eighth. Dr. Clevenger was seventy-nine years old and was considered the dean of the medical profession in Garrett, where he had practiced since 1889. He had served as mayor of Garrett in 1914 and again in 1918; he served on the board of health and was secretary several terms; he was a member of the school board and was secretary of the board at the time of his death. He was an active member of various civic organizations. Dr. Clevenger graduated from the University of Nashville, Medical Department, Nashville, Tennessee, in 1888, and was an honorary member of the DeKalb County Medical Society, the Indiana State Medical Association, and a member of the American Medical Association.

DEATHS OF INDIANA PHYSICIANS IN 1939

NAME	AGE	DATE	PLACE	CAUSE OF DEATH on death certificate
Ackerman, Charles L.	71 years	Jan. 4	Brownstown	Pneumonia.
Lewis, James Franklin	83 years	Jan. 4	Dupont	Hypostatic pneumonia, Hypertrophy of prostate, epithelioma of face.
Stanfield, William V.	62 years	Jan. 7	Attica	Coronary thrombosis.
Paddock, Charles A.	64 years	Jan. 17	Portland	Chronic myocarditis.
Reynolds, Arthur E.	64 years	Jan. 19	South Bend	Suicide by gunshot wound.
Cooper, John	80 years	Jan. 23	Kempton	Carcinoma of stomach.
Severin, Louis	68 years	Jan. 23	Bluffton	Suicide, gunshot wound.
Parramore, J. O.	50 years	Jan. 24	Crown Point	Brain tumor.
Caffee, Amos H.	74 years	Feb. 1	Terre Haute	Coronary thrombosis.
LeMaster, Ralph E.	36 years	Feb. 3	Marion	Coronary occlusion.
Woolery, John S.	33 years	Feb. 3	Bedford	Auto wreck.
Badger, Charles L.	60 years	Feb. 6	Indianapolis	Overdose of a narcotic.
Ryan, Charles D.	61 years	Feb. 7	Indianapolis	Coronary occlusion, mitral stenosis.
DeLancey, Sheldon S.	78 years	Feb. 7	Williamsport	Infirmities of old age.
Ross, Nelson B.	65 years	Feb. 8	Michigan City	Cardiovascular-renal disease.
Kelsay, Clarence	62 years	Feb. 10	Evansville	Pneumonia.
Peckinpaugh, George R.	84 years	Feb. 10	Mt. Vernon	Hypostatic pneumonia, general degeneration of the heart, prostatitis, cystitis.
Miltimore, Ira	58 years	Feb. 14	Gary	Coronary occlusion, chronic nephritis and myocarditis.
Ringle, T. F.	88 years	Feb. 15	Tippecanoe	Angina Pectoris.
Droom, Edgar E.	83 years	Feb. 21	N. Manchester	Nephritis, general senility.
Fisher, Bayless E.	57 years	Feb. 21	YoungAmerica	Pulmonary tuberculosis, diabetes mellitus.
Julian, Edward T.	73 years	Feb. 26	Harlan	Influenza, nephritis, acute uremia.
Reed, John H.	78 years	Mar. 2	Logansport	Pneumonia.
Peffer, Harry C.	33 years	Mar. 6	Orleans	Violent death by firearms.
Young, Franklin	72 years	Mar. 6	Terre Haute	Arteriosclerotic heart disease, bundle branch block, congestive heart failure.
Freeman, James F.	84 years	Mar. 9	Evansville	Broncho pneumonia, chronic myocarditis, auricular fibrillation.
Kelly, John C.	82 years	Mar. 10	Mitchell	Carcinoma of stomach and intestines.
Flack, O. M.	72 years	Mar. 11	Boswell	Injuries received in a fall.
Neifer, Frank J.	72 years	Mar. 11	South Bend	Abdominal carcinomatosis.
Turner, Thos. S.	74 years	Mar. 11	Lebanon	Mitral insufficiency, bronchial asthma.
Ewell, Wardlaw	72 years	Mar. 12	Crawfordsville	Cerebral hemorrhage.
Brown, Archie S.	62 years	Mar. 12	Indianapolis	Coronary occlusion.
Ladd, Franklin B.	73 years	Mar. 14	Ft. Wayne	Angina pectoris.
Davis, William M.	67 years	Mar. 18	Worthington	Cerebral hemorrhage, generalized arteriosclerosis.
Macbeth, Harriett S.	66 years	Mar. 18	Ft. Wayne	Diabetes, arteriosclerosis, heart failure.
Marchand, Victor H.	76 years	Mar. 19	Haubstadt	Auto wreck.
Grayston, Charles E.	81 years	Mar. 29	Huntington	Cerebral hemorrhage.
Grandstaff, John C.	66 years	Mar. 31	Preble	Uremia, coronary occlusion, myocarditis.
Sarber, Wallace C.	66 years	April 6	Argos	Coronary thrombosis, bronchopneumonia.
Reese, George B.	73 years	April 11	Brazil	Cerebral hemorrhage, paralysis of right side, acute dementia from pressure due to hemorrhage.
Trook, Edwin M.	76 years	April 10	Marion	Coronary occlusion, coronary sclerosis.
Bassett, Clarence C.	59 years	April 12	Goodland	Coronary thrombosis.
Lockhart, Archibald S.	68 years	April 13	Indianapolis	Bronchopneumonia, myocarditis.
Schreiber, Adam W.	59 years	April 14	Lafayette	Septicemia, acute general myocarditis, chronic appendicitis, gangrenous appendiceal abscess.
Jones, C. Agnes (McMahan)	89 years	April 21	Lafayette	Senility.
O'Brien, Bertrand M.	58 years	May 1	Danville	Pulmonary tuberculosis, pneumonia.
Ross, James Clay	62 years	May 3	Marion	Cerebral sclerosis and edema.
Murray, Ralph V.	58 years	May 6	Roanoke	Angina Pectoris.
Chambers, Benjamin Franklin	71 years	May 31	Lyons	Suicide, gunshot.
Seaman, Joseph B.	74 years	June 3	Mishawaka	Ruptured abdominal aneurysm.
Donnelly, James E.	67 years	June 7	Terre Haute	Myocardial degeneration.
Harris, Robert W.	78 years	June 8	New Albany	Coronary occlusion, chronic hypertensive heart disease, arterial hypertension.
Taggart, Robert S.	69 years	June 10	New Wash.	Chronic prostatitis, chronic nephritis.

NAME	AGE	DATE	PLACE	CAUSE OF DEATH on death certificate
Eastman, Fred. P.	78 years	June 17	South Bend	Cerebral hemorrhage.
Howland, Morton	76 years	June 17	Huntington	Endocarditis, arteriosclerosis.
Current, O. E.	67 years	June 18	Farmland	Coronary thrombosis.
Phares, Henry E.	68 years	June 26	Shelbyville	Carcinoma of stomach.
Barnett, Otto	71 years	June 26	New Harmony	Acute angina pectoris.
Culver, Thomas M.	87 years	June 28	Anderson	Chronic nephritis.
Zarick, Waheeb S.	43 years	June 28	Indianapolis	Coronary occlusion, arteriosclerosis.
Geary, John K.	87 years	June 29	Ft. Wayne	Diabetes Mellitus.
Barnett, John T.	80 years	June 30	Jonesboro	Chronic myocarditis and nephritis.
Johnson, Austin S.	42 years	July 1	Indianapolis	Coronary thrombosis.
Duddy, Edward C.	72 years	July 2	Indianapolis	Hypertensive heart, pulmonary edema.
Doughty, Lenore Leeds	56 years	July 7	Lawrenceburg	Cerebral hemorrhage.
Benson, Newton J.	91 years	July 8	Indianapolis	Heart exhaustion.
Fankboner, Wm. A.	78 years	July 14	Marion	Carcinoma of mesenteric lymph glands.
Andrews, Ellis H.	68 years	July 17	Peru	Auto wreck.
Hammersley, Wm. L.	70 years	July 18	Frankfort	Coronary occlusion.
Norrel, James R.	65 years	July 20	Indianapolis	Acute bronchopneumonia, chlorosis.
Biddle, Frank M.	64 years	July 27	Battle Ground	Pulmonary malignancy.
Holtzendorff, Henry C.	68 years	July 30	Mishawaka	Acute heart failure.
Mace, William D.	71 years	July 31	Lafayette	Acute dilatation of the heart.
Ferguson, William G.	__ years	Aug. 1	Ft. Wayne	Cerebral hemorrhage.
Knight, Everett D.	38 years	Aug. 5	Anderson	Subacute bacterial endocarditis.
Fargher, James H.	64 years	Aug. 6	Laporte	Coronary occlusion.
Truelove, August O.	57 years	Aug. 7	Ft. Wayne	Pernicious anemia.
Held, Henry W.	69 years	Aug. 9	Vincennes	Diabetes mellitus, diabetic gangrene.
Olsen, Oliver S.	55 years	Aug. 20	Gary	Carcinoma of bowels.
Danner, Rufus J.	65 years	Aug. 26	Terre Haute	Coronary thrombosis.
Flavien, Edward B.	63 years	Aug. 27	New Haven	Carcinoma of the lungs.
Stephenson, Richard	72 years	Sept. 1	West Lebanon	Coronary sclerosis.
Spink, Mary A.	75 years	Sept. 3	Indianapolis	Malaria.
Johnson, Roy W.	57 years	Sept. 4	Indianapolis	Coronary occlusion.
Veach, Patrick H.	77 years	Sept. 4	Staunton	Cerebral hemorrhage.
Grim, George B.	73 years	Sept. 5	Evansville	Arteriosclerosis.
O'Brien, Cecil B.	41 years	Sept. 7	Greencastle	Acute cardiac failure, adenocarcinoma of colon.
Mugg, Henry M.	64 years	Sept. 17	Clarks Hill	Coronary occlusion.
Thomas, Phillip B.	79 years	Sept. 20	Decatur	Cerebral hemorrhage, endocarditis.
Duenweg, Rudolph	48 years	Sept. 22	Terre Haute	Coronary embolism.
Douglas, John E., Sr.	53 years	Sept. 23	Garrett	Coronary thrombosis, chronic myocarditis.
Barnfield, John H.	75 years	Sept. 27	Logansport	Coronary occlusion.
Mack, William E.	55 years	Sept. 29	Indianapolis	Pulmonary tuberculosis.
Hockett, Charles P. (Clarkson P.)	72 years	Sept. 29	Kouts	Cancer of intestines, hemorrhage of lungs, senility.
McFadden, Walter C.	60 years	Sept. 30	Shelbyville	Coronary thrombosis.
Beck, William S.	76 years	Oct. 6	Indianapolis	Congestive heart failure, edema of brain.
Cleveland, Wm. F.	83 years	Oct. 10	Evansville	Cerebral hemorrhage.
Keeney, Bayard G.	63 years	Oct. 11	Shelbyville	Coronary occlusion.
Harold, Frank L.	61 years	Oct. 14	Richmond	Acute nephritis, acute enterocolitis.
Miller, Chas. E.	69 years	Oct. 17	Muncie	Coronary heart disease, bronchopneumonia.
Ritter, John A.	90 years	Oct. 19	West Baden	Paraplegia, senile complications.
Martin, George F.	80 years	Oct. 20	Corydon	Carcinoma of the stomach.
Munns, Clyde J.	54 years	Oct. 24	Newburg	Generalized carcinoma, abdominal carcinomatosis.
Funk, Austin	65 years	Oct. 24	Jeffersonville	Auto wreck.
Moss, James K.	82 years	Oct. 24	Ashboro	Cardio-rental disease.
Ford, Oliver P. M.	75 years	Oct. 25	Centerville	Myocarditis, abdominal aneurysm.
Englerth, Perry O.	65 years	Oct. 25	N. Judson	Coronary thrombosis.
Schoier, Charles O.	63 years	Oct. 25	Jasper	Overdose of morphine.
Ogle, Albert A.	71 years	Oct. 31	Indianapolis	Coronary occlusion, coronary heart disease.
Fulkerson, Clarence D.	68 years	Nov. 5	French Lick	Carcinoma of the rectum with metastasis to the lymph nodes and lungs.
Haggard, Ernest M.	77 years	Nov. 7	Indianapolis	Cerebral hemorrhage.
Custer, A. T.	68 years	Nov. 11	Indianapolis	Diabetes mellitus, broncho pneumonia.
Jones, John G.	90 years	Nov. 23	Indianapolis	Chronic myocarditis, arteriosclerosis.
Slocum, Stewart	71 years	Dec. 18	Fortville	Auto wreck.
Martin, Charles F.	53 years	Dec. 18	Booneville	Coronary occlusion, rheumatic heart disease.
Forbis, Burrell F.	91 years	Dec. 20	Corydon	Bronchopneumonia, influenza.
Biggerstaff, James T.	86 years	Dec. 22	Wabash	Chronic myocarditis and endocarditis, cerebral hemorrhage.
Oakley, James H.	70 years	Dec. __	Evansville	Cerebral hemorrhage, right hemiplegia, nephritis.

News Notes

Dr. Harold E. List, of Marion, has gone to Pensacola, Florida, where he is taking a two-months' course in aviation medicine.

Dr. I. W. Davenport, oldest Sheridan physician, celebrated his eighty-second birthday at his home there, January fifteenth.

Dr. Patrick H. Weeks, of Michigan City, recently observed his twentieth anniversary as Indiana State Prison physician.

Dr. William D. Haggard, of Nashville, Tennessee, former president of the American Medical Association, died of a heart attack in Palm Beach, Florida, January twenty-eighth.

Miss Olive Johnston, of New York City, and Dr. John J. Hayes, of Fort Wayne, were married January thirty-first in Fort Wayne.

Dr. C. D. Greene, of Spencer, has been named Owen County health officer. Dr. Greene succeeds Dr. B. Yocum of Coal City who has served for the past ten years as county health officer.

Miss Neila Goodelle, of Worcester, N.Y., and Dr. F. Minton Hartz of Evansville, were married at the home of the bride's uncle and aunt in Palm Beach, Florida, February sixth.

Dr. David Murray Cowie, professor of pediatrics at the University of Michigan, died at his home in Ann Arbor on Friday, January 26. Dr. Cowie was a nationally known pediatrician.

Dr. Martin K. Kreider, of Goshen, celebrated his ninety-third birthday, January eighteenth, with a family dinner at his home. Dr. Kreider practiced medicine in Goshen for fifty-six years before his retirement from active practice in 1934.

Dr. and Mrs. Carl B. Sputh of Indianapolis have announced the marriage of their daughter, Charlotte, and Dr. John Shore Hash, February fifteenth. Dr. and Mrs. Hash will reside in Williamsport, Indiana, after March fifteenth.

Dr. John G. Benson, superintendent of the Indianapolis Methodist Hospital, was a speaker before the eleventh assembly of the Texas Hospital Association in San Antonio, February twenty-third.

Dr. John W. McGowan observed his eighty-sixth birthday at his home in Oakland City, January twenty-second. Dr. McGowan still is in active practice, and has been a physician in Oakland City and surrounding community for nearly sixty years.

Dr. W. T. Lawson, of Danville, aged ninety-one and still practicing, was given an extensive write-up in the Danville *Republican*, January twenty-fifth, in the column headed "Around the Town." Dr. Lawson began his practice in Danville in 1878 and has been secretary of the Hendricks County Medical Society since 1880.

Dr. Gerald D. Timmons, former acting dean of the Indiana University School of Dentistry, Indianapolis, has been named executive secretary of the American Dental Association. His appointment becomes effective March first. Dr. Timmons' headquarters will be in Chicago.

Dr. E. B. Mumford, of Indianapolis, was re-elected treasurer of the American Academy of Orthopedic Surgeons at the closing session of the organization's convention in Boston, Massachusetts, January twenty-sixth. Dr. Robert Schrock, of Omaha, Nebraska, was elected president of the academy.

Every one who "enlisted" in the Women's Field Army for Control of Cancer in 1939 has received a copy of Dr. Clarence Cook Little's book, "The Fight Against Cancer." The state headquarters office has mailed more than two thousand copies of the book which contains essential information to protect women against the disease.

The first dinner meeting to be held in Hurty Hall in the new building of the State Board of Health was the meeting of the Indiana Social Hygiene Association, February fifth, when Dr. Walter Clarke, New York, executive secretary of the American Social Hygiene Association, was the speaker.

Clinical pathologists from all parts of Indiana met in Fort Wayne to attend a quarterly clinical convention of the Indiana Association of Clinical Pathologists, January twentieth. Visiting pathologists were guests of Dr. B. W. Rhamy at the Fort Wayne Medical Laboratory where the session was held. Dr. Frank T. Hunter, of Lafayette, president of the organization, presided at the meetings.

According to newspaper announcement, Dr. S. F. Teaford, of Paoli, for thirty-four years a practicing physician there, has retired from active practice. Dr. Teaford is health officer for Orange County.

Dr. Max Bahr, superintendent of the Central State Hospital, spoke before a community club in Anderson, February fifteenth, on the subject of "The Sound and Unsound Mind."

Dr. J. M. Kercheval has sold his practice in Wolcottville to Dr. W. K. Nance and Dr. Doris Hoffman who have opened offices there. Dr. Kercheval plans to locate in a southern state.

Eleven counties will take part in a southwestern Indiana social work conference in Evansville, February twenty-ninth. Dr. Herman Baker of Evansville is general chairman for the meeting. Speakers scheduled include Judge Wilfred Bradshaw, Indianapolis; Judge A. J. Veneman, Evansville; Edward F. Stegen, Evansville; Dr. Minor Miller, Evansville; Miss Mildred Arnold, Indianapolis, and Miss Emma Puschner of Indianapolis.

Dr. J. A. Albert, district physician for the CCC at Pocatello, Idaho, sends an announcement saying that his district is experiencing difficulty in securing doctors for positions as full time contract surgeons for the various camps in the district, located in Idaho, Wyoming and Utah. The pay of a full time contract surgeon is $3,200 per year. Any interested physician may communicate with the District Physician, Pocatello District, CCC, Pocatello, Idaho.

A general committee of representative citizens has been considering the construction of a proposed new 103-bed unit at St. John's Hospital in Anderson to provide more adequate hospital facilities for the city. It is planned to organize a drive for raising a fund of $150,000 to help finance the project. Sisters of the Holy Cross who operate the hospital announced that the organization would match all funds raised publicly in the effort to provide the new unit.

The American Board of Internal Medicine, Inc., will conduct oral examinations previous to the meeting of the American College of Physicians in Cleveland and just in advance of the meeting of the American Medical Association in New York City. Applicants who have passed the written examination and plan to take the oral examination in 1940 should advise the secretary at least six weeks in advance of the date of the examination they desire to take. Information may be obtained from Dr. William S. Middleton, secretary, 1301 University Avenue, Madison, Wisconsin.

The eighteenth annual convention of the Woman's Auxiliary to the American Medical Association will be held in New York City, June 10 to 14, 1940, with headquarters in the Hotel Pennsylvania. It is urged that reservations be made immediately through the Housing Bureau which has been set up by the American Medical Association, namely, Dr. Peter Irving, Room 1036, 233 Broadway, New York City. It is expected that attendance at the World's Fair will accelerate advanced hotel reservations.

The U. S. Public Health Service held a conference in Atlanta, Georgia, February 13 and 14, with Dr. Thomas Parran presiding, to consider the problems connected with syphilis control in the southern states. Sixty-five per cent of all the syphilis in the United States is concentrated in the southern states. States represented at the conference were Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, Missouri, Oklahoma, North Carolina, South Carolina, Tennessee, Texas, Virginia, West Virginia, and the District of Columbia.

The Northern Tri-State Medical Association will hold a meeting April ninth, in Battle Creek, Michigan. Speakers for the day include Drs. George J. Curry, Flint, Michigan; Carl J. Klemme, West Lafayette, Indiana; F. L. Adair, Chicago; Thomas E. Jones, Cleveland, Ohio; L. J. Hirschman, Detroit; Vincent J. O'Conor, Chicago; David M. Slight, Chicago; James B. Costen, St. Louis; and Walter C. Alvarez, Rochester, Minnesota.

The American Association of Obstetricians, Gynecologists and Abdominal Surgeons Foundation, Inc., offers a foundation prize of $150 for a thesis. Eligible contestants are interns, residents, or graduate students in obstetrics, gynecology or abdominal surgery, and physicians who are actively practicing or teaching the specialty. Manuscripts must be limited to 5,000 words and must be in the hands of the secretary before June first. Complete information in regard to the contest may be obtained from the secretary, Dr. James R. Bloss, 418 Eleventh Street, Huntington, West Virginia.

The American Association for the Study of Goiter again offers the Van Meter Prize Award of $300 and two honorable mentions for the best essays submitted concerning original work on problems related to the thyroid gland. The award will be made at the annual meeting of the Association at Rochester, Minnesota, April 15, 16 and 17, providing essays of sufficient merit are presented in competition. Competing essays may cover clinical or research work, should not exceed three thousand words, must be in English, and a double-spaced, typewritten copy sent to the

Among Those Present at the Secretaries' Conference



Left to right: *Dr. E. L. Henderson, Louisville, Ky.; Dr. Karl Ruddell, Indianapolis; Senator James E. Murray, Butte, Montana; Dr. Irvin Abell, Louisville, Ky.; Dr. Peter Irving, New York City; Dr. A. W. Booth, Elmira, New York; Dr. R. L. Sensenich, South Bend; Dr. Henry H. Turner, Oklahoma City, Oklahoma.*

corresponding secretary, Dr. W. Blair Mosser, 133 Biddle St., Kane, Pennsylvania, not later than March fifteenth.

Dr. C. H. McCaskey of Indianapolis attended the Southern Section of the American College of Surgeons at New Orleans, January 17, 18, 19, where he presented two papers, on "Etiology and Treatment of Acute Surgical Mastoiditis," and one on "Sinusitis and Its Relation to General Systemic Disease." Dr. McCaskey is scheduled to appear before the Detroit-Ann Arbor section of the American College of Surgeons in April.

Dr. J. C. Flynn, a graduate of the University of Michigan who practiced medicine in the State of New York until about September, 1915, when his license was revoked because of conviction of violation of the narcotic act, has been missing from New York since April, 1930. Mrs. Flynn is trying to locate Dr. Flynn, whose full name is Jeremiah Charles Flynn. If any one of our readers know anything about Dr. Flynn, please communicate with the Michigan State Police, East Lansing, Michigan.

The American Physicians' Art Association composed of over eight hundred physicians in the United States, Canada, and Hawaii who follow some form of Fine or Applied Art as an avocation, will hold the next annual art show at the Belmont-Plaza Hotel, New York City, June tenth to fourteenth. This exhibit is held in conjunction with the American Medical Association Convention to be held at the same time in the vicinity of the Belmont-Plaza. All physicians in active practice or retired who have an art hobby, including photography, are cordially invited to participate in the New York Exhibit. A physician may become a member of this Art Association by mailing a check for one dollar to the Treasurer, Dr. R. W. Burlingame, San Francisco County Hospital, San Francisco, Calif., and briefly stating what art medium the applicant follows. For detailed information kindly write to the Executive Secretary, Dr. F. H. Redewill, 526 Flood Bldg., San Francisco, Calif.

Drs. Maurice S. Fox, Richard H. Fox, John C. Warren and Vance J. Chattin have announced their association for the practice of medicine and surgery under the name of Associated Group Clinic at Bicknell, Indiana.

Dr. Elizabeth Kane of Indianapolis spoke on "Mental Hygiene" before a group at Indiana State Teachers College in Terre Haute, February nineteenth. Dr. Kane's talk was the second in a series of ten talks concerning contemporary culture.

NORTHWEST CONFERENCE BECOMES NATIONAL

Twenty-one Indiana representatives, including Mr. Paul G. Hoffman of South Bend, president of the Studebaker Corporation, who was the principal speaker, made the National Conference on Medical Service held in Chicago, February 11, almost a Hoosier affair. The conference, which is the outgrowth of the old Northwest annual get-together, developed this year into a national meeting with a registration of more than two hundred representatives from twenty-five different states.

"Battle for Freedom on the New Front" was the title of Mr. Hoffman's talk in which he stressed the necessity of maintaining individualism and the competitive system in America but also strongly advocated that the medical profession make every effort to eliminate waste from the present system of rendering services to the public. Dr. R. L. Sensenich of South Bend, a former president of the conference, lead one of the discussion groups during the meeting. The Michigan State Medical Society acted as hosts for the conference with L. Fernald Foster of Bay City, secretary of the Michigan State Medical Society, presiding.

Among those from Indiana who registered were: Drs. E. M. Van Buskirk, Karl Ruddell, A. M. Mitchell, Herman Baker, F. S. Crockett, George Dillinger, C. B. Parker, R. L. Hane, William Garner, A. H. Ellison, Roscoe Sensenich, N. K. Forster, Harry Brandman, and Mr. Paul Waddell, Mr. Rollen Waterson, Mr. William Stonebraker, and Mr. Thomas A. Hendricks.

INDIANA UNIVERSITY NEWS NOTES

Dr. Neil D. Carter, a former resident of Indianapolis, has been appointed head of the adult hygiene division of the State Board of Health in Ohio. Dr. Carter is a graduate of Butler University and the Indiana University School of Medicine.

Addition of a full-time laboratory technician and a part-time physician to the recently established staff of the City Hospital dispensary to expedite further the hospital economics and teaching facilities of the Indiana University school of medicine has been announced by Dr. Charles W. Myers, superintendent of the hospital.

The full-time dispensary staff, made possible by a $10,000 grant of the school of medicine last October, already has brought about outstanding accomplishments in relieving the in-patient load of the hospital and increasing the teaching range of the medical school, Dr. Myers said.

Under the cooperative plan, the medical school is said to be the only one in the country with facilities for giving graduate physicians a thorough two-year course of practical training for general practice of medicine.

Dr. Myers and Dean W. D. Gatch of the Indiana University school of medicine pointed out that the new plan, started November 1, is proving mutually beneficial to the taxing units and to the medical educational institution of the state.

Whereas the dispensary served an average of 611 patients a day in September, the average was reduced to 566 a day in December, records of the City Hospital disclosed. At the same time the number of patients admitted to the hospital showed an appreciable reduction, Dr. Myers said.

Dr. Ralph Leser is the part-time physician named to the staff and Miss Martha Johnson, formerly of the Indiana State Board of Health, is the laboratory technician. The $10,000 grant given by the School of Medicine of Indiana University is being used not only for salaries of the staff members, but for the equipping of a laboratory which is serving the dispensary exclusively.

Full-time physicians appointed last fall were Dr. J. E. Tether, Jr., and Dr. A. M. Hasewinkle. Other additions to the staff may be made starting with the university's fiscal year, July 1, it was announced.

Dr. Myers, praising the medical school for its cooperation with the City Hospital, asserted that the dispensary plan not only is mutually advantageous, but unique in the country.

Lieut. Col. Franklin T. Hallam, executive officer of the 113th medical regiment, Indiana National Guard, and a graduate of the Indiana University School of Medicine in 1925, has been assigned to command the medical regiment of the state.

SOCIETIES AND INSTITUTIONS

INDIANA STATE MEDICAL ASSOCIATION EXECUTIVE COMMITTEE

February 4, 1940.

Roll call showed the following present: C. A. Nafe, M.D., chairman; Karl R. Ruddell, M.D.; A. M. Mitchell, M.D.; E. M. Van Buskirk, M.D.; M. A. Austin, M.D.; A. F. Weyerbacher, M.D.; Albert Stump, attorney, and T. A. Hendricks, executive secretary.

The statements of Receipts and Expenditures for December and January for THE JOURNAL and the Association committees were approved.

Membership Report

	1938	1939	1940	Loss 1940
Number of members Jan. 31.....	2087	2093	1941 (67 hons.)	52
Number of members Dec. 31, 1939....			3145	

Treasurer's Office

Financial statement on THE JOURNAL and the association accounts, made by the George S. Olive and Company, appears in the February issue of THE JOURNAL.

1940 Annual Session at French Lick

Meeting dates are Tuesday, Wednesday and Thursday, October 29, 30 and 31, 1940.

Dr. E. M. VanBuskirk, member of the State Board of Health, is to report to the committee whether or not the health officers will hold their annual meeting on Monday preceding the annual session of the state association.

By order of the Council, no scientific exhibit is to be held this year.

Report made that the Scientific Program Committee is to be called for a meeting by Dr. Robert M. Moore, the chairman, toward the end of February or the first of March.

The October issue of THE JOURNAL will be the convention issue.

Legislative, Legal and Social Security Matters

National

According to the information at hand, the President's plan for the construction of fifty hospitals throughout the country in areas where need for such institutions is shown seems to have succeeded the Wagner bill.

a. Communications have been received at the headquarters office from the Hendricks County Medical Society and from Benton county indicating that the profession in those two communities desires such hospitals. Report made by Dr. Nafe that copies of these communications are in the hands of Dr. V. K. Harvey who, as health officer of the State of Indiana, is the one through whom these communications are transmitted to the Surgeon General's office at Washington.

Numerous letters received from Dr. West, Dr. Fishbein, Dr. Austin Hayden, Dr. Booth, and others in regard to the secretaries' conference and

the meeting with Senator James E. Murray brought to the attention of the committee. The general impression is that the conference was very much worthwhile.

Letter received from the Wisconsin Medical Society calling attention of the Indiana profession to the results of the Senate compulsory sickness insurance survey that was carried on recently by the *Christian Science Monitor* brought to the attention of the committee. The *Christian Science Monitor* of January 29 carried an article by E. D. Canham which stated that out of 71 members answering the *Christian Science Monitor* poll, 33 were opposed to compulsory sickness insurance, 33 were non-committal, and only five senators were in favor.

Correspondence from the American Medical Association in regard to the inclusion of an item of $600,000 "for the acquisition of a site for a new building in which to house the vast collection of invaluable medical literature comprising the Army Medical Library and Museum" brought to the attention of the committee. This letter was brought to the attention of the legislative committee of the state association at a recent meeting and this committee authorized the sending of a comunication to each of the Congressmen asking them to support an appropriation for such a library.

Copy of the pamphlet entitled "Dentistry and Government," distributed by the National Health Program Committee of the American Dental Association brought to the attention of the committee. The committee feels that this is one of the best handbooks that has yet come to its notice on the general subject of the national health program and the government and the committee instructed the secretary to request the National Health Program Committee of the dental association to send a number of copies for distribution to the officers, members of the Executive Committee, and legislative committee of the state medical association. It was also thought that it would be well to have an editorial comment in regard to this pamphlet in the next issue of THE JOURNAL.

Local

Letters from J. T. Oliphant, M.D., president of the State Board of Medical Registration and Examination, to Dr. Mitchell presented to the committee by Dr. Mitchell. These letters give figures showing the financial distress of the medical board and in part read as follows: "The whole situation (in regard to the medical law of Indiana) is so critical that unless some solution is found by the State Medical Association, and some relief afforded by the next session of the legislature, our standards in Indiana will be discredited completely before two more years." The committee suggested that these letters be sent to Dr. Ellison, chairman of the Committee to Study Cultists and Irregular Practitioners, to Dr. Shanklin, and to Drs. Wright and Beatty, co-chairmen of the legislative committee, for their information.

Letter from the president of the Indiana Association of Clinical Psychologists to Dr. Mitchell, asking for help of the state medical association in passing legislation which would license clinical psychologists, brought to the attention of the committee. The committee referred this letter to Dr. Larue Carter, chairman of the Committee on Mental Health, for study and consideration by his committee.

Attention of the committee was called to the statements that have been made by Judge James A. Emmert of Shelbyville, candidate for the Republican nomination for Governor, who has taken an open, unequivocal stand against socialized medicine. Judge Emmert says socialized medicine "is a dangerous and unworkable experiment that would throttle medical progress by letting politics control the medical profession."

Organization Matters

The 1940-41 Committee on Secretaries' Conference named by the chairman, Dr. R. L. Hane, follows:

William M. Dugan, Indianapolis; M. J. Thornton, South Bend; L. Paul Hart, Evansville; C. G. Kern, Lebanon; and A. M. Mitchell, Terre Haute.

Upon the motion of Dr. Austin, seconded by Dr. Ruddell, the committee approved these appointments and discussed the possibility of a different type of secretaries' conference for next year —a program in which the secretaries themselves would have opportunity to discuss their own county society matters.

Letter from Dr. Harold M. Camp, secretary of the Illinois State Medical Society, brought to the attention of the committee, telling of the creation of an executive committee by the Illinois society. Dr. Camp asked for information as to how the Executive Committee of the Indiana State Medical Association functions and this has been supplied to him in detail.

The Executive Committee reaffirmed its ruling made on Sunday, January 21, that all dues received from February 1 to February 29 shall be dated February 1 this year in order to give every physician an extra thirty days before his medical defense protection lapses this year. This ruling was made because of the raise in dues, and the committee felt that some leeway should be given this year in order that no doctor would lose his medical defense protection by not paying on February 1. This action was taken by the committee at the request of the officers of the Indianapolis Medical Society, and the ruling of the committee makes it apply to the entire state.

Letter received from Frederick Jackson, M.D., asking questions in regard to state committees, state funds, etc. Information supplied to Dr. Jackson as requested.

Report made to the committee that the LaPorte County Medical Society may incorporate. Albert Stump, attorney for the association, wrote to the

officers of the society giving them details as to how to proceed to incorporate.

State Board of Health

Rules of standardization for maternity homes and hospitals discussed by the Executive Committee, along with correspondence from Sullivan county and a verbal complaint presented by Dr. Mitchell on behalf of the Vigo County Medical Society. Dr. Mitchell informed the committee that a formal letter was forthcoming from the Vigo County Medical Society in regard to this matter. The committee suggested that Dr. Asher and Dr. Mettel be asked to attend the next meeting of the Executive Committee in order that this subject might be discussed.

Dr. Nafe discussed the conferences that were held by the State Board of Health in regard to the certification of laboratories under the new marriage law. The committee expressed its opinion that the State Board of Health should not draw the restrictions so close as to keep many reputable physicians who are now making Wassermann tests from qualifying to make tests under the new act.

Group Hospitalization and Medical Service Plans

Literature received from Michigan in regard to Michigan medical service plans. Request made by members of the committee to be placed on the Michigan mailing list to receive copies of material in regard to Michigan medical service plans.

Letter received from Parke G. Smith, M.D., of Cincinnati, president of the Ohio State Medical Association, telling about the presentation of a medical service enabling act at the last session of the Ohio legislature which was defeated "primarily because we did not have proper opportunity to educate our own profession to the fact that medical service plans are social medicine and, under no circumstances, socialized medicine." Dr. Smith stated that from the viewpoint of the medical profession he felt that the Ohio plan was the best of any of them.

Letter received from Enoch J. Brand, analyst of Chicago, offering his services in setting up a hospitalization insurance program for the members of the medical profession of Indiana similar to the set-up made for the Chicago Medical Society. The committee referred this correspondence to Dr. N. K. Forster, chairman of the Permanent Study Committee on Health Insurance and National Medical Situation of the state association.

A proposal received from the Medical Society of Virginia for hospital care of the indigent and low income group brought to the attention of the committee. The committee felt that there was a great deal of merit to this communication and suggested that an editorial comment in regard to it be carried in THE JOURNAL of the state medical association.

Medical Economics

The following three suggestions of Dr. J. C. Carter were presented to the committee:

a. Prescription blanks should have printed on them, "No copy, no refill." The committee discussed this suggestion but felt that nothing practical could be done about it.

b. Physicians should be paid by insurance companies for filling out blanks and a minimum fee set. This was referred to the Committee on Civic and Industrial Relations of the state association, the chairman of which is Dr. A. F. Knoefel of Terre Haute.

c. Next year's meeting should have one session devoted to an economic round table discussion. This was referred to the Scientific Program Committee.

Newspaper clipping headlined, "Physicians of Columbus Ban Dead Beats," brought to the attention of the committee. The newspaper article states that "twenty-seven physicians of Columbus and Bartholomew county, members of the county medical society, have appeared in a newspaper advertisement here announcing concerted action against 'chiselers'."

The committee was informed that several medical societies had met and discussed the charging of standard fees of their communities for making examinations required under the new pre-marital and prenatal laws. The committee is of the opinion that this is a question which should be determined in each community and that no statewide standard fee should be set for these examinations.

Attention of the committee was called to an article in the February issue of THE JOURNAL by Albert Stump in regard to refugee physicians.

Report of the Bureau of Medical Economics of the American Medical Association in regard to "Medical Care in the United States" brought to the attention of the committee. The committee suggested that some editorial comment be made in regard to this report in THE JOURNAL.

Indigent Sick

Dr. Mitchell told the committee that he had received a telephone call from Dr. O'Dell Archer (veterinarian), president of the Township Trustees Association, requesting a meeting with the committee from the medical association. Dr. Mitchell stated that he had told Dr. Archer to have Mr. Charles Dawson, secretary of the Township Trustees Association, contact the headquarters office of the state medical association in order to complete arrangements for such a meeting. The committee suggested that the word be passed on to Dr. J. S. Leffel, chairman of the Medical Relief Committee of the Indiana State Medical Association, which was appointed specifically to investigate such matters and to meet with committees representing such groups as the Township Trustees Association.

Sickness Insurance and Socialized Medicine

Report of the debate broadcast on the Town Meeting of the Air in which Dr. Terry M. Town-

send, president of the Medical Society of the State of New York, Dr. C-E. A. Winslow of Yale, and Dr. Henry E. Sigerist of Johns Hopkins, debated the question, "Does America Need Compulsory Health Insurance?" made to the committee.

The attention of the committee was also called to the debates in Ohio by Dr. Kingsley Roberts who favors the group practice of medicine. The committee feels that the time has come when the viewpoint of the medical profession on the subject of socialized medicine should be presented by trained platform speakers and it recommends that the Bureau of Publicity of the state association be requested to obtain such speakers who are available to fill engagements here in Indiana. The names mentioned that might be placed on this list of speakers are:

L. L. Bomberger, Hammond, 1938 president, Indiana State Bar Association.

Rev. James Lawson, First Methodist Episcopal Church, 219 Russell Street, Hammond.

George Beauchamp, North Manchester, President, Indiana State Debating League, and Associate Professor of Speech, Manchester College.

Albert Stump, Indianapolis, Attorney for Indiana State Medical Association.

Samuel B. Pettengill, South Bend, former representative in Congress.

The committee suggested that these men be made available free of charge to the local medical societies when they request speakers on socialized medicine, the expenses to be borne by the state association through the Bureau of Publicity. To cover this expense the Budget Committee set aside $500.00 for this service.

Editorial which appeared in *The Anderson Herald*, published by William Toner, in which the approach to the problem of socialized medicine by the National Physicians' Committee is praised, was brought to the attention of the committee. The committee suggested that a note concerning this editorial be prepared for THE JOURNAL.

Copy of the article, "The People Demand Public Health," by Paul de Kruif, which appeared in a recent issue of the *Country Gentleman*, was sent to each member of the committee.

Notice of the "Committee of 1,000,000," a special committee against socialized medicine headed by Gerald L. K. Smith (formerly connected with Huey Long) was brought to the attention of the committee. The headquarters for Smith's committee is Detroit, Michigan.

Poster against socialized medicine, prepared by the Ohio State Medical Association for physicians to display in their offices, brought to the attention of the committee.

U. S. Pharmacopoeial Convention in Washington, May, 1940

Letters from Dr. Paul Nicholas Leech, secretary of the Council on Pharmacy and Chemistry of the A.M.A., and other material in regard to the U.S. Pharmacopoeial convention which is to be held in Washington on May 14, 1940, brought to the attention of the committee. The Executive Committee went on record approving the appointment by Dr. Ruddell, the president, of three physicians to represent the Indiana State Medical Association at the convention. Those suggested to represent the association are:

Dr. Ruddell is to send the official notice to the delegates named by him to represent the association.

National Physicians' Committee

Protest of the New Jersey State Medical Society against this organization brought to the attention of the Executive Committee.

State Board of Medical Registration and Examination

Suggestion made that Toner Overley, manager of the Better Business Bureau, be invited to attend the next meeting of the Executive Committee.

The Journal

Letter from Dr. E. M. Shanklin, editor of THE JOURNAL, read to the committee. The committee approved unanimously and enthusiastically the remarks made by Dr. Shanklin at the secretaries' conference.

Letter sent to the secretaries of county and district medical societies at the request of the Cooperative Advertising Bureau, urging them to clip coupons, approved by the Executive Committee. Copies of this letter were distributed to those who attended the secretaries' conference.

WOMAN'S AUXILIARY

President—Mrs. W. E. Tinney, Indianapolis.
President-elect—Mrs. C. R. Bock, Muncie.
Corresponding Secretary—Mrs. Byron Rust, Indianapolis.
Treasurer—Mrs. C. V. Rozelle, Anderson.

Mrs. W. E. Tinney, State President, and Mrs. Fred Wishard, State Organization Chairman, have reported the completion of five new county auxiliaries, organized in February. These are the Woman's Auxiliary to the Grant County Medical Society, organized February 1st with Mrs. George Daniels, Marion, Indiana, as president; the Woman's Auxiliary to the Marshall County Medical Society, organized February 7th with Mrs. C. R. Graham, Bourbon, Indiana, as president; the Woman's Auxiliary to the Decatur County Medical Society, organized February 9th with Mrs. W. E. Smith, Decatur, as president; the Woman's Auxiliary to the Tippecanoe County Medical Society, organized February 13th with Mrs. Russell Flack, Lafayette, as president; and the Woman's Auxiliary to the Cass County Medical Society, organized at Logansport February 16th, with Mrs. Charles Viney, of Logansport, as president.

The State Auxiliary wishes to welcome these newest units, whose enthusiasm is surely a prediction of their future success in this work. The State Auxiliary is particularly pleased with the

opportunity that the growth of the organization gives to widen the sphere of activity and influence of our auxiliary in promoting the work undertaken for the medical profession.

The January issue of the *News Bulletin* of the Woman's Auxiliary to the American Medical Association is now available. Subscriptions for the four quarterly issues may be had at a dollar. Your state officers wish to urge that the *Bulletin* is considered indispensable to county auxiliaries in keeping in contact with the work of the auxiliary throughout the United States. The articles by national officers in the *Bulletin* are interesting and inspiring. Subscription orders may be placed through your State Press and Publicity Chairman.

State Auxiliary Officers appreciated the courtesy shown them in the invitation to attend the dinner meeting of the County Secretaries held at the Columbia Club in Indianapolis, January 21st, when U. S. Senator James E. Murray spoke on the Wagner Bill. It was an opportunity to further inform ourselves on this important subject.

THE FLOYD COUNTY AUXILIARY

Officers of the Woman's Auxiliary to the Floyd County Medical Society, 1939-1940

President.....Mrs. Parvin Davis
President-Elect.....Mrs. W. H. Garner
Vice-President.....Mrs. Kenneth Brown
Secretary and Publicity.....Mrs. John L. Habermel
Treasurer.....Mrs. W. Winstandley



Mrs. Parvin Davis

The Floyd County Auxiliary, organized January 9, 1936, with a membership of twenty, is still functioning successfully during its fifth year with a membership of thirty-four.

Each second Friday of the month a luncheon is held, followed by sewing at St. Edwards Hospital in New Albany. In addition, there are four business meetings held in September, December, March, and May. High points of the program are the Annual Anniversary Dinner held in January with the husbands as guests, and the annual June picnic for the County Medical Society. The chief interests of the auxiliary have been assistance to St. Edwards Hospital, and the tuberculosis sanitorium. This in spite of the Southern Indiana flood interference in the second year, when most of the meetings were cancelled. Assistance to the hospital has included acting as hostesses on National Hospital Day, benefit bridge parties, acting as hostesses for nurses' tea, distributing Christmas gifts to hospital patients, and helping the recently organized Hospital Guild. Christmas bags have been prepared each year for the Red Cross. Donations to the tuberculosis sanitorium have been made, and this year a tuberculosis hospital bond was purchased. Featured programs have included "Hobbies," "World Peace," "Local Landmarks," and various medical subjects such as "Tuberculosis" and "Conservation of Eyesight." A scrapbook started the first year is still growing.

The auxiliary has promoted the sale of *Hygeia*, and has donated subscriptions to local schools. One year a program to immunize children against smallpox and diphtheria was put on by the medical society assisted by the District Health Department, and the Auxiliary. A radio program sponsored by the county medical society was presented by the auxiliary. Members spoke parts in the play titled, "A Little Bit is Dangerous."

It has been planned to make the Public Relations Tea the outstanding event for the year with Mrs. James Baxter, Jr., State Public Relations Chairman, as local chairman, also. Representatives from laywomen's organizations, invited as guests, will hear a speaker on the Wagner Bill.

INDIANA STATE BOARD OF HEALTH

BUREAU OF COMMUNICABLE DISEASES

Monthly Report, December, 1939

DISEASES	*Dec. 1939*	*Nov. 1939*	*Oct. 1939*	*Dec. 1938*	*Dec. 1937*
Tuberculosis	83	145	92	202	126
Chickenpox	393	315	128	492	260
Measles	30	55	30	53	292
Scarlet Fever	654	540	320	765	666
Smallpox	16	8	24	182	219
Typhoid Fever	4	18	8	13	8
Whooping Cough	196	162	155	66	75
Diphtheria	102	91	89	108	113
Influenza	73	22	10	73	193
Pneumonia	85	31	23	107	100
Mumps	244	257	54	137	8
Poliomyelitis	2	10	19	0	1
Meningitis	5	2	2	5	2
Tularemia	40	6	6	111	28
Dysentery	3	2	0	0	0
Undulant Fever	9	8	8	5	5
Encephalitis	1	0	1	1	0
Septic Sore Throat	5	20	4	0	0

ARE YOUR 1940

DUES PAID?

LOCAL SOCIETIES

1940 OFFICERS:

BENTON COUNTY:
President, G. G. Morrison, Boswell
Vice-president, W. H. Altier, Fowler
Secretary-treasurer, Virgil Scheurich, Oxford

* * *

CLAY COUNTY:
President, Walter C. Bond, Clay City
Vice-president, J. Frank Maurer, Brazil
Secretary-treasurer, John M. Palm, Brazil

* * *

JACKSON COUNTY:
President, Harold E. Miller, Seymour
Vice-president, W. H. Shortridge, Seymour
Secretary-treasurer, G. H. Kamman, Seymour

* * *

FULASKI COUNTY:
President, C. E. Linton, Medaryville
Secretary-treasurer, T. E. Carneal, Winamac

* * *

RANDOLPH COUNTY:
President, L. W. Painter, Winchester
Secretary-treasurer, V. K. Stoelting, Winchester

* * *

RUSH COUNTY:
President, Lowell M. Green, Rushville
Vice-president, Joseph F. Bowen, Rushville
Secretary-treasurer, Robert D. Spindler, Milroy

* * *

STEUBEN COUNTY:
President, William F. Waller, Angola
Secretary-treasurer, S. S. Frazier, Angola

* * *

VANDERBURGH COUNTY:
President, Minor Miller, Evansville
Vice-president, Charles F. Willis, Evansville
Secretary-treasurer, L. Paul Hart, Evansville

* * *

WHITLEY COUNTY:
President, W. E. Wilkins, South Whitley
Vice-president, E. A. Hershey, Churubusco
Secretary-treasurer, Park Huffman, South Whitley

LOCAL MEETINGS

Benton County Medical Society members met at the Fowler Public Library in January. Dr. W. H. Altier, of Fowler, presented a paper on "Hospitalization in Benton County."

* * *

Cass County Medical Society held a dinner meeting at St. Joseph's Hospital, Logansport, on January nineteenth. Doctors William E. Barnett and Earl B. Jewell, of Logansport, spoke on "Anemias." Eighteen members were present. The society sanctioned organization of a woman's auxiliary.

Clark County Medical Society held its regular monthly meeting in January at the home of Dr. N. C. Isler in Jeffersonville where they were guests at a venison dinner. The business meeting following the dinner was held for the purpose of considering the various problems of medical care of the indigent in the community.

* * *

Clay County Medical Society members met in Brazil on February sixth. Attendance numbered ten. Officers for 1940 were elected.

* * *

Clinton County Medical Society met in Frankfort, February sixth, with eleven members present.

* * *

Dearborn-Ohio County Medical Society held a meeting at Lawrenceburg, February first. Dr. Louis Stickley, of Cincinnati, presented a paper on "Jaundice." Attendance numbered fifteen.

* * *

Decatur County Medical Society members met in the K. of P. Club Rooms, Greensburg, on January seventeenth. Dr. W. C. Callaghan of Greensburg spoke on "Sulfapyridine."

* * *

Elkhart County Medical Society held a dinner meeting in the Hotel Elkhart, February eighth. Dr. Manuel E. Lichtenstein, of Chicago, spoke on "Perforative Appendicitis." Attendance numbered thirty-five.

* * *

Fayette-Franklin County Medical Society members met at the McFarlan Hotel, Connersville, February thirteenth. Dr. C. B. Bohner, of Indianapolis, spoke on "Allergy."

* * *

Fort Wayne (Allen County) Medical Society held their regular business meeting, January twenty-third, in the Chamber of Commerce Building. Forty-seven members were present.

At the February sixth meeting, which was a dinner meeting, the guest speaker was Dr. Russell L. Haden, of the Cleveland Clinic, Cleveland, Ohio. His subject was "The Diagnosis and Treatment of Leukemia." Attendance numbered sixty-two.

* * *

Fountain-Warren County Medical Society met in Covington, in February, when a symposium was presented by Doctors Wemple Dodds, J. M. Kirtley, and George A. Collett, all of Crawfordsville,

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on "Toxemia of Gestation, Its Pathology, Diagnosis and Treatment." Attendance numbered twenty-three. This was a dinner meeting.

* * *

Greene County Medical Society members held a meeting at the Freeman Greene County Hospital, February fifteenth. Dr. Harry G. Rotman of Jasonville presented a paper on "Modern Conception of Scarlet Fever." Attendance numbered thirteen.

* * *

Hendricks County Medical Society met in Crawley's hall, Danville, January nineteenth. The business meeting included a discussion of obtaining a county hospital.

* * *

Henry County Medical Society held its regular meeting, January eighteenth, in New Castle, at which time the Henry County Chapter of the Infantile Paralysis Foundation was organized.

Dr. Edwin N. Kime of Indianapolis presented a paper on "Physical Therapy in General Medicine."

* * *

Howard County Medical Society members met at the Courtland Hotel in Kokomo, February second. Dr. Max Bahr, of Indianapolis, spoke on "Personality Changes."

* * *

Huntington County Medical Society met at the Hotel Lafontaine, Huntington, February sixth. Dr. Paul L. Stier, of Fort Wayne, presented a paper on "Heart Disease."

* * *

Indianapolis (Marion County) Medical Society met January thirtieth, at the Indianapolis Athletic Club, when case reports and discussions were presented by Doctors C. A. Nafe, Rogers Smith, J. H. Warvel, L. D. Carter, Walter Bruetsch, E. Vernon Hahn, William Rossman and L. H. Gilman.

At the February sixth meeting papers were presented by Dr. J. W. Emhardt and Dr. J. Jerome Littell.

At the February thirteenth meeting Dr. C. O. McCormick and Dr. C. A. Nafe presented papers.

* * *

Jasper-Newton County Medical Society was entertained at the Nu-Joy, Kentland, by Dr. O. E. Glick, of Kentland, on February first. Following the dinner, the business meeting was held at the home of the host, where Dr. James H. Stygall, of Indianapolis, presented a paper on "Modern Methods in Tuberculosis."

* * *

Jay County Medical Society met at the Jay County Hospital, January fourth, for a dinner meeting.

At the February second meeting Dr. William V. Woods, of Indianapolis, spoke on "Painful Feet."

(Continued on page xxii)

PROFESSIONAL PROTECTION

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(Continued from page xxi)

Lake County Medical Society met at St. Mary's Mercy Hospital, Gary, on February eighth. Papers were presented by Dr. William A. Brams, Chicago, on "Recognition and Treatment of Heart Failure," by Dr. Sidney A. Portis, of Chicago, on "Differential Diagnosis of Pain in the Right Upper Quadrant," and by Dr. Fred W. Fitz, Chicago, on "What the Doctor Should Think About When He Encounters Hypertension." Attendance numbered ninety-six.

* * *

LaPorte County Medical Society held a meeting at the Rumely Hotel, LaPorte, February fifteenth. Dr. Thurman B. Rice of Indianapolis talked about the new marital and prenatal laws. Twenty-four members attended. The meeting was open to the personnel of the county clerk's offices, local laboratory technicians, and county nurses.

* * *

Madison County Medical Society held a meeting at St. John's Hospital, February nineteenth. Dr. W. C. C. Cole, of Detroit, Michigan, spoke on "Etiological Factors in Neonatal Asphyxia."

* * *

Marshall County Medical Society members and their wives held a luncheon meeting at Plymouth, February seventh. Dr. M. E. Liston, of South Bend, spoke on "Anesthesia." The doctors' wives met with them to organize an auxiliary to the medical society.

* * *

Monroe County Medical Society held a joint meeting of their organization with the Bloomington Dental Society, January twenty-fourth, at the Country Club in Bloomington. Dr. W. H. Crawford, dean of the I.U. Dental School, and Dr. H. T. Briscoe, of the I.U. Department of Chemistry, were the speakers.

A dinner meeting was held January thirty-first in Boman's restaurant, Bloomington.

* * *

Montgomery County Medical Society met at Culver Hospital, January eighteenth, when Mr. J. I. Banash, of Chicago, spoke on "Oxygen Therapy." Attendance numbered twenty-two.

* * *

Muncie Academy of Medicine met at the Hotel Roberts, January thirtieth. Dr. E. L. Sevringhaus, of Madison, Wisconsin, presented a paper on "Endocrine Therapy in General Practice."

At the February thirteenth meeting, Dr. John A. Toomey, of Cleveland, Ohio, spoke on "Contagious Diseases."

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*"Treatment of Acute Anterior Urethritis with Silver Picrate," Knight and Shelanski, AMERICAN JOURNAL OF SYPHILIS, GONORRHEA AND VENEREAL DISEASES, Vol. 23, No. 2, pages 201-206, March, 1939.

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DEVELOPMENT OF THE CANCER CLINIC

J. W. HOFMANN, M.D.

INDIANAPOLIS

The Patrick clinic for the treatment of cancer which was the culmination of the careful planning of the original Cancer Committee of the Indianapolis City Hospital, made possible by the generous donation of Mr. Edwin L. Patrick and other public spirited citizens, has provided ideal care for cancer sufferers of this locality for the last year and a half. Its equipment has met with the approval of the American Society for the Control of Cancer and of the special Cancer Committee of the American College of Surgeons. Our most recent improvement over former equipment has been the addition of 208 milligrams of radium (this supplementing the 238 milligrams already owned) made available to us through the U. S. Public Health Service. This radium has been given to the institution in the form of a loan, of a permanent nature, but controlled by the Federal Government. It is turned over to us with the provision that it should be kept in active use for indigent patients under our care.

Perhaps the most valuable gift to the clinic, and one which should do more for its development as an efficient medical unit, is the granting of a fellowship by the Indianapolis Foundation, and the allowance for a full-time secretary to aid in the matter of records and statistics. The Foundation plans to finance these two for a period of two years, which period we hope will be extended if results prove satisfactory. The presence of a full-time resident, experienced in the use of radium and x-ray and reasonably well-versed in the study and treatment of malignancies, has obvious advantages in conducting a well organized clinic. He acts as a liaison officer between the patients and the consulting staff of the clinic, avoiding the loss of time between the diagnosis and proper treatment of cases which is often responsible for poor results.

Since the acquisition of the additional personnel, there has been a marked improvement in several ways, particularly in our ability to increase the number of patients handled and given adequate treatment. Formerly we were unable to handle more than 6 to 8 cases per day with high voltage x-ray; now we can give service to 3 or 4 times that number. At the same time, we have been able to keep accurate records of every detail of treatment in each instance. Furthermore, it has been possible to do the type of "follow-up" which has long been considered both essential and ideal. By constantly watching the records, the secretary is in a position to notify patients who have failed to come in for periodic check-up as previously instructed by the clinician. This leaves no missing link in the chain of functioning of a well intentioned clinic. It makes the statistics we can formulate more valuable because more accurate knowledge of the condition of all cases is available. The importance of this will be indelibly written in the records of the future.

A gratifying effect of the better organization and improved efficiency of our clinic has been the increasing response of the profession of this community. We have noted a marked increase in the number of cases referred to the clinic by individual physicians both for diagnosis and treatment. Approximately one-third of our cases have come to us in this way. This had a two-fold effect of bringing about a more prompt diagnosis and treatment and so leading to better end-results.

It is the intention of the clinic to cooperate with the private physician in aiding him to keep contact with his patient by allowing him to follow his case and note the progress, so that he may resume his care at such time as that is again possible. On the first and third Friday of every month, from 4 to 5 p.m., clinics are held for the general discussion of cases that have been treated. The referring physician and others interested are invited to attend this clinic, at which time they may gain any additional information regarding their case and are welcome to enter in the general discussion of any

cases presented. At these conferences, the essential factors of the history are brought out, the clinical and pathological diagnosis and, finally, the treatment to date and the prognosis are discussed. The referring physician is offered an opportunity of not only keeping in contact with the progress of his patient but also is invited to offer suggestions in the further handling of the case. Members of the general staff of the hospital, residents, internes, and any physicians wishing to attend are always welcomed at these conferences. Such gatherings are of signal assistance to the general welfare of the patient and have a progressive, educative value to the medical profession at large.

Even though we cannot have the ideal situation in each county or section of the state for a cancer clinic, we feel that our clinic can be a pattern for smaller communities. They may form clinics according to their limited facilities, and even greatly abbreviated activity will provide a nucleus for clinics which can be developed in a suitable way. Such an arrangement will not only arouse an interest in this subject by the physicians of the community but also the lay public will be undoubtedly activated to greater thought in this matter, with a greater response to our appeals for a well regulated health program and a semi-annual or annual check-up of their physical condition. They will thereby bring their ailments to our attention for earlier diagnosis and treatment. If and when such a program is realized in the future, then and only then will we be able to decrease the general mortality and morbidity of this great scourge.

The mortality statistics, both of the state and the country at large, have shown a steady increase in rate for many years past. For the State of Indiana the rate is 115.2 per 100,000 for 1939, which is slightly higher than the rate for the country at large—112 per 100,000. These figures, of course, can only be of relative value as a factor in the true increase of the number of actual cancer cases, although the American Committee for the control of cancer has noted a definite increase of cancer cases to the extent of about 2% yearly. It has been said by several authorities that there are in actual existence at all times of the year approximately 400,000 cases of active cancer.

Our experience of the past seven years of our existence has shown the value of the clinic organization. One of the main points of interest to us has been the gradual increase in the number of early cases that we are observing. This will necessarily portend better end-results in the control and possible cure of cancer. The actual cure of this scourge will not be definitely attained until such time as we have reached the goal of having deciphered the causative factor or factors of this disease. This phase of our problem is still in the offing. In spite of this hindrance, we should not be discouraged in our attack upon the problem, as early diagnosis and prompt and efficient treatment has shown a definite upward trend in our statistics the world over.

Cancer stands second to cardiac diseases as the most frequent cause of death, according to the latest reports. Cancer of the genital tract is responsible for one-third of the cancer deaths in women. Ninety percent of the uterine cancers arise in the cervix and are of the squamous type, and two percent are of the adeno-carcinoma type. The uterine cancer accounts for about 8% of the malignancies. Both areas are readily accessible for thorough study and treatment and should show results accordingly. The most favorable statistics for treatment of cancer, when limited to the portio of the cervix, shows a 52% cure, while not more than 20% of all cervical cancers have a five year cure. The League of Nations reports a total relative cure of 26.3% for all types of cervical cancer. Type 1 accounts for 55.2%; type 2 for 33.3%; type 3 for 21.2%; and type 4 for 5.3% of cases. Of 5,672 cases reported, 10.7% were grouped under type 1; 28.7%, type 2; 42.6%, type 3; 18%, type 4; unclassified, 0.04%.

The clinic has shown a progressive increase in the number of cases examined. During 1939 there were 346 new cases examined as compared to 277 cases in 1938. Of these new cases, 60 were referred from outside the hospital proper as compared to 59 in 1938. New patients referred to our clinic from other hospital clinics amounted to 286 patients in 1939 as compared to 218 in 1938. The total number of visits to the clinic in 1939 was 1486 visits or 4.2 visits per patient as compared to 1749 in 1938, or 6.3 visits per patient. The greater number of visits in 1938 was due in a large measure to lack of the proper organization. With the addition of a full time resident to our staff, we should expect an even greater improvement for 1940 in the efficiency of the clinic. The various types of cases seen during the year were as follows; skin, 103; eye, ear, nose and throat, 49; female genital tract, 89; breast, 58; male genitals, 16; gastro-intestinal tract, 23; miscellaneous cases, 6. The greatest increase occurred in the breast cases as compared to the 1938 records when only 35 cases were seen and treated. The total number of radium treatments given in 1939 was 99 as compared to 69 treatments in 1938. There were 1040 superficial x-ray and 3908 deep x-ray treatments given in 1939 as compared to 758 superficial and 2450 deep x-ray treatments in 1938.

Although our records are not of a sufficient duration of time elapsed from a statistical point of view, it may be of importance to give a few case reports. These case histories will reveal some of the problems that confront one in dealing with this type of case, both from a diagnostic and treatment standpoint.

Mrs. E.J., female, white, age 32, was admitted April 23, 1936, with a complaint of a foul, purulent vaginal discharge, with menorrhagia and metrorrhagia since the birth of her last child in December, 1935. She was seen ante-partum, once at about the eighth month, and twice post-partum. A notation was made that the cervix had an angry red

appearance at the first post-partum examination. At the time of the second examination she was referred to the cancer clinic. When seen at the latter clinic, the cervix revealed a stellate scarring of the cervix. The entire posterior lip of the cervix showed a moderate degree of induration and overgrowth of the epithelial cells. The tissue bled readily upon the slightest irritation. Clinically this was a Grade 2 case of malignancy of the cervix. A biopsy was taken and reported as Grade 2 histo-pathologically. She was admitted to the Patrick Cancer Clinic of the hospital under date of May 13, 1936, receiving an adequate dose of both x-ray and radium treatment. She has been under observation in the follow up clinic ever since her last treatment. During 1936 and 1937 she was seen at intervals of two months and in 1938 and 1939 she was seen every four months. She has gained about 17 pounds to date and reveals no evidence of extension or recurrence of her original condition. A follow up biopsy was done on October 21, 1936, and again on February 2, 1937, with negative results. The object of reporting this case is to impress upon those who are doing obstetrics the necessity of a thorough vaginal examination per speculum both ante- and post-partum at reasonable intervals of at least one or two months.

Case No. 2 presented both a pre-operative and operating room diagnostic problem. R.C., female, white, age 46, was admitted to the hospital December 22, 1936, with the following complaints: (1) pain in the lower quadrants of the abdomen; (2) loss of twenty pounds in the past three years; (3) muco-purulent vaginal discharge for the past ten months of an increasing degree. In 1913 she had undergone a pelvic operation for a pelvic abscess. The abscess was drained through the vagina with drainage continuing for about four months. Menses at this time were somewhat irregular and profuse for some odd months. Menses became regular about five months following this operative procedure and remained so up to the time of the present attack of pelvic symptoms and signs. The present illness, except for the loss of weight, began two months prior to the admission to the hospital for the ailment. Physical examination was essentially negative except for the following findings: the cervix was smooth and revealed no pathology other than a protruding small polyp. The polyp emanated from the region of the internal os of the cervix. The uterus was in a position of retroflexion and firmly bound down in the pouch of the cul-de-sac of Douglas. The uterus was somewhat irregular in outline with bilateral firm adnexal masses of about equal size. These adnexal masses were somewhat painful and tender but not unduly so, with no appreciable bladder or rectal symptoms. In view of these clinical findings and the symptoms complained of, surgery was advised and accepted. Laboratory findings and temperature, pulse and respiration were all within range of normal limits.

The patient was operated under date of December 28, 1936. The uterus and adnexa were found bound down in the pelvis with a distinct thickening of the walls of the tubes. The tumor mass involvement of the tubes was firm, hard, and friable and a tentative diagnosis of malignancy of the tubes was made and confirmed by a frozen pathological section examined at the time of surgery. As the result of these findings, a complete removal of all the genital organs was performed (Wertheim procedure). The final report from the pathologist of the tissue removed was a primary adeno-carcinoma of the fallopian tubes with a beginning endometriosis of the uterus. This latter condition in all probability accounted for the symptoms of pain for the past two months and brought her to seek medical advice.

The patient made an uneventful post-operative recovery and was discharged from the hospital under date of January 11, 1937. She was given several series of post-operative deep x-ray treatment—a total of 9,360 roentgen units over a period of ten months in 1937. Follow up records reveal that the patient made good progress until October, 1937, when she first began to feel that she was not making satisfactory progress as in the past ten months. She noticed that she was not gaining any more weight and her appetite was failing somewhat. Physical examination up to this time did not reveal any evidence of recurrence. In fact, no evidence of recurrence showed itself in any definite way until December, 1938. From then on her signs and symptoms of recurrence became progressively more evident and she died in May, 1939.

Case No. 3 is presented to impress upon one the fact that even what appears to be a hopeless case can in some instances be rehabilitated and become a useful productive citizen in our community. Patient L.E., female, white, age 56, was first seen at the clinic March 17, 1937, with the following complaints: loss of 45 pounds from July, 1936, to March, 1937; vaginal hemorrhage; hot flashes; and general malaise. Other complicating conditions were that she has been an active pulmonary tubercular case for several years. She has had four full term pregnancies with no miscarriages, the last pregnancy 20 years ago. Menses were regular prior to the onset of the present symptoms, which date back to about July, 1936. Pelvic examination at this time revealed a firm, friable fungating mass about the size of a pear projecting from the cervix and extending into the vagina. This mass bled rather freely upon the slightest irritation. There was no apparent involvement of the adnexa as far as it was discernible under the circumstances. On account of the conditions presented at the time of examination, the patient was immediately admitted to the hospital cancer ward for treatment on March 17, 1937. The protruding fungating mass was removed with a minimum amount of trauma and shock to the patient, electro-surgically. The specimen was submitted for pathological examination and reported as a squamous cell carcinoma,

Grade 4, histo-pathologically. From a clinical point of view, this case was also graded 4 on account of the extensive involvement of the cervix extending on to the vaginal wall laterally and some possible extension into the broad ligaments. Deep x-ray treatment was immediately instituted, and she received 2,300 roentgen units over a period of 23 days, from March 17, to April 10, 1937. At the end of two weeks, having shown no ill effects from the x-ray treatment, she was given 30 mgm. of radium with 1½ mgm. platinum filter intra-vaginally and intra-uterine; a total of 60 mgm. of radium for a period of 90 hours, totaling 5,400 mgm. hours. From May 9, 1937, and for a period of six weeks, she was given a second series of deep x-ray treatments for a total of 3,900 roentgen units. The entire treatment was completed on June 10, 1937, and since then the patient has shown a steady and progressive gain in weight and strength. In March of 1939 her chest condition flared up and necessitated her being hospitalized for a period of ten months. She has been observed and examined at the follow-up clinic of the hospital every two to four months during this time and has shown no evidence of any extension or recurrence up to February 10, 1940. Incidentally, she has been reported as an apparently arrested case by the consultant in tuberculosis.

It is such developments as depicted in the review of these case records that inspires one to carry on in this field of endeavor. Although the results in many instances are not as encouraging as in two of these cases reported, nevertheless we see and note a definite upward trend, so we can say with true and honest convictions that we are observing a gradual and consistent improvement in our end-results.

Even though the etiological facts or factors of cancer have not been brought to light, it must be recognized that the cause is not lost. Considerable progress has been made by the cooperative efforts of the internist, surgeon, pathologist, radiologist and, last but not least, the general practitioner. Our major improvement in the past two years has been through the cooperative efforts of the general practitioners of this community. They have taken advantage of their opportunities in many instances and our statistics are revealing the results of their efforts. The Women's Field Army, too, has done much for the cause. In the short period of a few years they have formed a state organization that is second to none over the country. They are carrying on their work in a diligent, conscientious, and progressive way that is a real credit to them and also accrues much benefit to the unfortunate sufferers of their sex. They spread the good news of the advantages of periodical examinations, which in simpler terms means taking inventory of the human body at well regulated intervals,—advantages to which every individual should have a just right. No true business man can properly run his business without taking at least an annual inventory of his business; just so we cannot continue properly to carry on our mental and physical functions of the body without some knowledge of our reserve and carrying-on powers. It is in this phase of the work of carrying the message to the public that the members of the Women's Field Army have been a real asset to the cause of cancer control in this community.

Aside from the service of this clinic to the patients of this community, it is providing a valuable training field to the medical students, internes of the hospital, visiting physicians, and to the hospital staff as a whole. In both the in-patient and out-patient service of the hospital, the internes have the opportunity of following up the course of the patient's diagnosis, treatment and end-results with the opinions and advice of the consulting staff of the hospital proper and cancer clinic. With these opportunities he is better prepared to diagnose and treat his future patients in his chosen field of medicine. Thus one can say that in a cancer clinic there is a four-field area of expansion of knowledge: first, making the public more conscious of their body resources; second, educating the profession at large; third, increasing our resources with greater cooperation among the respective specialties of medicine; and, fourth, increasing our efforts in the field of research.

323 HUME MANSUR BUILDING.

ABSTRACT

MENTAL HEALTH OF STUDENTS RECEIVING MORE ATTENTION

Mental hygiene for the student is a concept that is gaining increasing encouragement among school teachers and administrators, Charles R. Foster, New Brunswick, N. J., declares in *Hygeia, The Health Magazine* for March.

A study of New Jersey schools, he says, shows that in many communities every step in the educative process, from the selection of teachers and textbooks to the awarding of diplomas at the end, is being examined in the light of its effect on the pupils' mental health.

Commenting on the nature of mental hygiene, Mr. Foster says it is largely preventive. It attempts to keep our minds in health, our emotions under reasonable control, our purposes wholesome and our attitude toward other people free of suspicion, jealousy or other signs of defect.

Mr. Foster mentions the following methods by which mental hygiene may be approached in the schools:

"Constant emphasis, both on the part of the teachers and administrators, on the need for understanding the child before attempting to teach him.

"Constant effort to improve the means of evaluating and reporting on the pupil's work.

"Flexibility in handling children (their assignment to classes, courses and subjects) so that adaptations may be made to suit their needs.

"Changes in the curriculum, so that what the children are studying will have meaning to them.

"Definite arrangements for the study of pupils' needs and for their guidance, and a wider range of extracurricular activities."

EARLY SYMPTOMS AND SIGNS OF CANCER OF THE STOMACH*

JOHN F. HABERMEL, M.D.
NEW ALBANY, INDIANA

This paper deals with the early symptoms and signs of cancer of the stomach, emphasizing the necessity of early diagnosis while the disease is still local and of treating the disease immediately, radically, and thoroughly.

Upon the early diagnosis of cancer depends the hope in the treatment of the disease. Successful treatment is rare when the disease is far advanced. In many regions of the body, cancer can be recognized in its early stage but attempts at diagnosis of early cancer of the stomach presents many difficulties.

Carcinoma of the stomach is the most common clinical type of cancer. It is estimated that one-third of the cancer in man and one-fifth in women occur in the stomach. Its frequency can not be accurately estimated as to its increase or decrease. The only factors in etiology known are those which are supposed to favor a gastric ulcer, particularly carious teeth. Cancer's origin in gastric ulcer is debatable. This question is surrounded by confusion, the idea has neither been accepted nor disproved nor has anything more plausible been suggested.

If a definite relationship can be established between gastric ulcer and cancer then its early surgical removal becomes the obvious procedure for cancer prophylaxis with regard to the stomach.

In the early operable stages it is not possible to conclude from the clinical evidence or the x-ray findings whether an ulcer is simple or malignant. When the nature of a cancer lesion is clinically evident, the patient has lost his chance for cure.

The literature reveals the incidence of stomach cancer as 70 per cent after the fiftieth year, 20 per cent between the ages of 40 and 50, and about 10 per cent in patients under 40 years. Seventy-five per cent of stomach cancer occurs in males. Group studies show that the main symptoms are pain and gaseous indigestion. Next, a loss of appetite with weight loss, a varying anemia and general weakness. Because of these indefinite subjective symptoms, patients with these complaints should be suspected of having carcinoma of the stomach and complete studies should be made to attempt to verify or to disprove its possibility. The x-ray, Wassermann test, complete blood counts, stool examinations for occult blood and gastric analysis are the mechanical aids at the physician's command to help him formulate a diagnosis. Also, a social history is important. Those diseases, such as syphilis, pernicious anemia and the indigestion secondary to gallbladder disease or to social worries are similar to the clinical picture of early cancer of the stomach. A few conditions as benign tumors of the hollow viscera, chronic pancreatitis, cancer of the pancreas and the like add confusion in the diagnosis and are best located through the opened abdomen.

Our profession is still far from possessing methods capable of giving us the diagnosis of cancer of the stomach in its earlier stages but at least we can try. Judging from my own experience generally neither the patient nor the physician suspects cancer until vomiting or a tumor or a hemorrhage suggests its presence. The question between an ulcer and cancer should not be debated long if the ulcer is demonstrable from the symptoms and the filling defect, because it is impossible to say this is ulcer and that is cancer. Every sure ulcer of the stomach should be considered a possible cancer and the treatment instituted on that basis. It is unjustified to try medical treatment in a found stomach ulcer. However, the very small ulcer as shown by x-ray with a normal or plus gastric acidity and the ease from food is the common combination of symptoms and signs favoring a benign ulcer.

The treatment of stomach cancer divides itself into surgical and non-surgical. If there are metastatic nodes above the clavicle, nodules in the pelvis that can be felt on rectal examination, an enlarged nodular liver or free abdominal fluid, the patient naturally is beyond help and it is useless to explore surgically. A mass alone, even with fixation, is not a contraindication to surgical intervention. If operation is considered, it is essential to better the patient's resistance by replacing deficient chlorides, gastric lavage, and to combat the anemia by blood transfusions. When the abdomen is opened, the surgeon is confronted with the problem as to resection, gastroenterostomy or the closure of the abdomen without doing any procedure.

Resection gives the better results providing the patient is in condition to stand it and if it can be performed mechanically. Even with the involvement of the lymphatic system it is agreed that the patient will live longer and more comfortably. In those cases of obstruction of the pylorus with the impossibility of the removal of the growth, a gastroenterostomy probably will make the patient more comfortable for a time. One must keep in mind that it is very easy to mistake a deep indurating ulcer for a cancer. Gastroenterostomy is needless and useless if there is widespread cancer of the stomach. Examination of the liver for nodules and of the omentum when there is lymphatic involvement is in order. If this be the picture, the abdomen should be closed without attempting surgical mechanics.

Cancer of the stomach presents a dark outlook for the patient at the present time. Statistics show

* Presented before the Floyd County Medical Society at the regular monthly meeting, December 8, 1939.

that 40 per cent can be resected. About one-fourth of this forty percent will be living and well for five years after operation. If we physicians and the patients look deeply at the situation, realizing that stomach ulcer means nearly the same as cancer, there will be less diets, powders and antispasmodics and the like, and more surgical elimination of the ulcer. We must accept this view until the cause of cancer is discovered because, until then, we can not expect a better diagnostic method.

MEDICAL SERVICE IN INDIANA INDUSTRIES

LOUIS W. SPOLYAR, M.D.
INDIANAPOLIS

In a recently completed study[1] of Indiana industries, made by the Bureau of Industrial Hygiene of the Indiana State Board of Health, some data were obtained relative to the medical services available in Indiana industries. This investigation was not a study of the medical facilities only, but was an inclusive compilation of data relevant to: potential occupational diseases; number and size distribution of plants; population statistics; medical, safety, and sanitary welfare data; record keeping; and industrial epidemiology, namely, job analysis.

This paper will concern itself with the summary of the medical facilities available to Indiana workers only. For other findings, please refer to the original study.

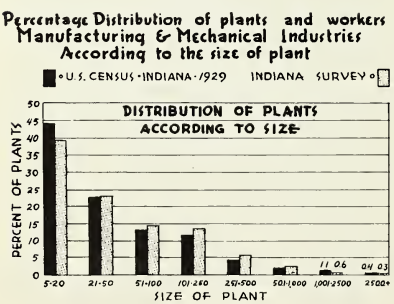
SCOPE AND PLAN OF STUDY

There were studied 2,545 plants through the sampling technique employing 247,817 people in the mechanical and manufacturing, extraction of minerals, laundries and dry cleaning classification of industries. Ten graduate engineers recorded the basic data on two standard forms. Form 3 was designed to record the welfare data while Form 4 was used to study each occupation. Six months were consumed in recording the raw data obtained by the engineers.

Each worker was observed while at work and notations were made relative to his job, noting nature of job, raw materials and by-products used, and control measures employed. Thus for each plant one Form 3 and as many Form 4's as were necessary were accomplished. It was not unusual to have the surveys number 200 or more pages per plant. The raw data recorded on these two forms was checked for completeness, edited, tabulated and analyzed in the central office.

[1] Spolyar, L. W., Wiley, J. S.: "Preliminary Industrial Hygiene Survey of Indiana Industries." Indiana State Board of Health Publication, 1939.

FIGURE 1.



STATISTICAL SUMMARY

1. The 1930 U. S. Census listed 404,059 people engaged in the industries studied. The sample accounted for 61.3% of this figure or 247,817 workers.

2. 3,813 plants were in existence at the time of the study of which 2,545 were studied.

3. 78.5% of plants studied employed less than 100 workers while 96.8% employed less than 500 workers. The bulk of Indiana's industry is in small plants. (See Figure 1.)

MEDICAL FACILITIES

It was shown that 4.1% of the workers of the group studied had the services of a company-owned hospital while 9.0% were employed by companies having a definite service contract with some hospital. First aid rooms were available to 55% of the employees and 88% had the use of a first aid kit. 49.8% of the workers had the services of a trained first aid worker. This figure is much higher for the mining industry and due credit should be given this industry for its extensive first aid program.

It was further learned that 10% of the workers had the services of a full time plant physician and that 18.5% were cared for by part time physicians. This does not indicate that the remaining workers did not have medical services in the event of an injury, but it does indicate that the medical services of Indiana industries are largely of the "on call" type.

More than 35% of the workers had the service of a full time plant nurse. Part time nursing services were reported for less than 1% of the study group. (See Table 1.)

Accident records were kept for 98.3% of the workers and sickness records for 56.7% of the workers. Sick benefit associations were reported for the benefit of 50.3% of the employees. (See Table 2.)

TABLE 1—INDUSTRIAL WELFARE PROVISIONS—MEDICAL

Industry or Service Group	Number of plants	Number of workers	Percent of Workers to Whom Service is Available: Hospitals: Company	Hospitals: Contract	First Aid room	First Aid kit	Trained first Aid worker	Physician: Full time	Physician: Part time	Nurse: Full time	Nurse: Part time
All Industries	2,545	247,817	4.1	9.0	55.0	88.0	49.8	10.0	18.5	35.5	0.8
Extraction minerals	74	4,704	0.0	0.0	48.3	97.9	90.7	0.0	4.3	0.0	0.0
Coal mines	47	4,125	0.0	0.0	50.2	98.5	97.2	0.0	0.0	0.0	0.0
Quarries	27	579	0.0	0.0	35.1	93.3	44.0	0.0	35.1	0.0	0.0
Manufacturing and mechanical	2,309	238,183	4.2	9.4	56.1	87.7	49.8	10.4	19.1	36.9	0.9
Chemical and allied	107	15,741	17.8	51.3	82.3	48.8	46.8	32.9	33.8	76.0	0.8
Cigar and tobacco	10	1,035	0.0	0.0	87.9	100.0	4.0	0.0	0.0	0.0	67.0
Clay, glass and stone	169	15,343	0.0	14.5	45.5	95.6	48.5	0.4	27.3	27.5	0.0
Clothing	100	17,456	0.0	3.0	55.2	98.3	19.5	0.0	0.0	17.8	0.0
Food and allied	535	35,464	0.0	0.3	32.6	97.3	41.2	0.0	2.9	11.9	1.4
Iron and steel	480	80,728	5.7	13.5	73.8	84.9	65.6	22.2	28.0	52.7	0.7
Metal industry except iron and steel	143	9,474	6.9	2.9	51.7	94.8	66.8	0.0	6.2	19.3	0.0
Leather	21	2,056	0.0	0.0	53.8	99.6	29.9	0.0	1.0	24.7	0.0
Lumber and furniture	287	18,757	0.0	0.7	24.7	97.8	34.3	0.0	5.2	9.8	1.0
Paper and printing	272	12,075	0.0	1.7	25.0	96.3	19.8	0.0	0.0	4.3	0.0
Textiles	51	8,232	0.0	0.0	73.9	81.9	13.1	0.0	44.5	69.0	0.0
Misc. manufacturing and mechanical	134	21,822	9.3	0.0	56.3	80.7	72.8	7.0	32.9	53.6	0.0
Domestic and personal service	162	4,930	0.0	0.0	7.8	94.2	9.5	0.0	0.0	0.0	0.0
Laundries	101	3,781	0.0	0.0	8.1	95.0	12.4	0.0	0.0	0.0	0.0
Cleaning, dyeing and pressing shops	61	1,149	0.0	0.0	6.6	91.7	0.0	0.0	0.0	0.0	0.0

TABLE 2—INDUSTRIAL WELFARE PROVISIONS
DISABILITY STATISTICS

Industry or Service Group	Number of plants	Number of workers	Percent of Workers to Whom Indicated Facility is Available: Sick benefit association	Sickness records	Accident records
All Industries	2,545	247,817	50.3	56.7	98.3
Extraction minerals	74	4,704	10.1	8.6	99.5
Coal mines	47	4,125	7.2	7.2	99.6
Quarries	27	579	30.7	18.1	99.1
Mechanical and manufacturing	2,309	238,183	51.8	58.3	98.5
Chemical and allied	107	15,741	78.9	82.1	96.4
Cigar and tobacco	10	1,035	67.0	68.9	97.7
Clay, glass and stone	169	15,343	51.1	58.7	99.5
Clothing	100	17,456	24.5	28.7	97.8
Food and allied	535	35,464	29.2	31.3	97.4
Iron and steel	480	80,728	68.6	77.5	99.3
Metal industry except iron and steel	143	9,474	39.1	43.5	99.8
Leather	21	2,056	72.0	51.6	99.8
Lumber and furniture	287	18,757	30.4	32.4	98.9
Paper and printing	272	12,075	37.2	38.3	96.1
Textiles	51	8,232	21.6	59.3	98.7
Miscellaneous	134	21,822	67.6	76.1	99.6
Domestic and personal service	162	4,930	23.0	27.1	88.8
Laundries	101	3,781	23.3	27.5	91.6
Cleaning, dyeing and pressing shops	61	1,149	22.0	26.1	79.3

TABLE 3—COMPARISON OF INDUSTRIAL HEALTH SERVICES IN INDIANA INDUSTRIES WITH SIMILAR DATA FROM OTHER STATES

Kind of Service	Percentage of Workers with Indicated Services: Ind.	Ill.	Ohio	Md.	Va.	S.C.	Colo.	Idaho	Utah	Me.	N.H.	Ark.
Safety provisions—												
Safety director—Full time	24.9	21.7	37.8	37.6	17.8	0.0	30.8	6.3	38.8	12.7	12.3	12.4
Safety director—Part time	21.0	30.5	24.2	20.8	27.6	4.1	21.1	35.5	17.4	41.4	14.0	(a)
Shop committee	46.3	5.8	48.2	59.3	61.5	55.7	40.3	24.7	46.3	59.2	33.2	30.8
Insurance service	81.2	90.5	(a)	97.8	98.7	(a)	91.6	99.4	61.3	(a)	92.9	(a)
Other safety provisions	51.8	41.7	(a)	56.5	80.7	36.1	35.3	40.7	48.0	(a)	0.7	(a)
Medical provisions—												
Hospital—Company	4.1	0.4	18.5	25.8	17.2	(a)	22.5	10.1	25.5	4.5	1.4	(a)
Hospital—Contract	9.0	8.9	(a)	(a)	(a)	(a)	11.3	53.2	43.8	(a)	0.8	(a)
First aid room	55.0	54.5	55.1	55.8	50.0	35.0	36.2	31.0	62.2	51.3	47.3	(a)
First aid kit	88.0	97.0	90.1	97.7	97.5	67.3	89.2	96.8	90.6	76.9	99.2	(a)
Trained first aid workers	49.8	33.7	51.8	65.4	64.7	(a)	46.7	58.3	72.6	45.2	39.2	(a)
Physician—Full time	10.0	9.7	22.1	30.7	21.0	0.0	23.8	10.0	30.5	0.5	4.5	10.1
Physician—Part time	18.5	20.2	27.8	42.4	25.6	24.2	9.1	17.7	19.0	26.8	4.3	2.1
Nurse—Full time	35.5	32.2	43.1	40.3	30.6	23.8	29.5	16.8	25.2	33.8	21.2	8.7
Nurse—Part time	0.8	1.5	1.9	0.0	1.9	3.7	1.3	0.1	4.9	1.9	1.7	1.7
Disability benefits and records—												
Sick benefit organizations	50.3	44.2	43.9	47.8	35.1	(a)	44.5	36.0	64.6	31.7	28.7	19.4
Sickness records	56.7	42.3	49.8	54.5	34.1	26.8	38.9	38.5	65.3	35.5	29.3	22.8
Accident records	98.3	97.5	87.2	96.9	98.5	98.2	89.9	99.3	98.9	97.7	99.1	61.8

(a) Data not available.

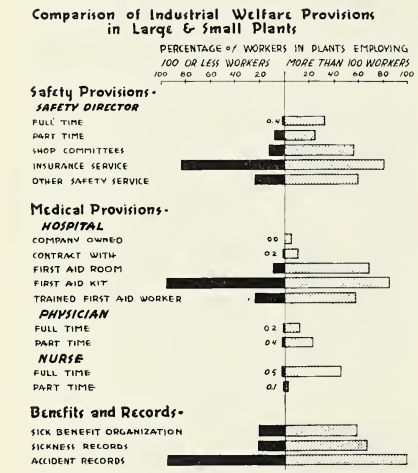
SANITATION

The majority of sanitation fixtures were found to be of the type not approved by the Indiana State Board of Health. Approved fixtures found were: fountains—20.2%; lavatories—62.5%; flush toilets—15.8%; pit privies—38.6%; and urinals—47.3%. However, the ratio of workers per facility was near recommended ratio. Common towels and common drinking cups were used by 44.8% and 15.9% of the workers respectively. Individual drinking cups were available to 15.3% of the workers.

DISCUSSION

If one compares the medical facilities of large and small plants one is immediately struck by the difference. The small plant offers insurance service, a first aid kit, and the keeping of accident records *as its medical service*. Larger plants tend toward maintaining a more balanced medical service, as one can readily see by reference to the accompanying figure 2.

FIGURE 2.



These services compare favorably with other states, but even so are far from adequate for Indiana as well as for the rest of the country.

The apparent reason for this is the fact that for Indiana, as well as for the U. S., the small plants predominate. Newquish[2], in his study for the American College of Surgeons, explains this shortcoming by stating that plants employing less than 500 people can not economically render the health services needed. There are 96% of such plants in Indiana which fall into this category. Thus, one of the biggest problems confronting the small plant manager today is how to get adequate medical services for his plant.

1098 West Michigan Street

[2] Newquish, M. N.: "Medical Service in Industry and Workmen's Compensation Laws." American College of Surgeons, Chicago, 1938.

ABSTRACTS

URGES EXAMINATION BY BRONCHOSCOPE WHEN LUNG CANCER IS SUSPECTED

Because approximately 10 per cent of all cancer deaths are due to primary cancer of the lung, a condition for which surgery now offers a good chance of survival if performed early, all suspected cases should be examined with a bronchoscope (an instrument for viewing the interior of the windpipe), Richard H. Overholt, M.D., and William Ray Rumel, M.D., Boston, declare in *The Journal of the American Medical Association* for March 2.

Such an examination should be made of all patients with a dry or productive cough, either alone or in association with fever, chest pain or discomfort, bleeding and wheezing, the two Boston doctors say.

Pointing out that cancer of the lung is 100 per cent fatal without surgical treatment, the authors report that in a group of seventeen patients who had a diseased lung removed eight are living and well with no evidence of recurrence of the cancer. They are all able to carry on the same activities in which they were engaged before the operation. Of four patients from whom a lobe of the lung was removed, three recovered from the operation and were discharged as improved.

"The numerical importance of the problem becomes apparent," the physicians observe, "when it is appreciated that approximately 15,000 people in the United States die each year from cancer originating within the lung, and approximately 150,000 persons die from cancer of all types each year. The lung is a common, rather than a rare, site for the development of a primary malignant growth."

* * *

WARNS OF BENZEDRINE ADDICTION

A warning of the possibility of addiction to amphetamine (benzedrine) sulfate, from its continued use, is made by Sidney Friedenberg, M.D., Camden, N. J., in *The Journal of the American Medical Association* for March 16.

Dr. Friedenberg cites the case of a young woman who, given tablets of the drug for weight reduction, found that she could not carry on her duties of a beautician without the stimulus that the drug supplied. She had been taking amphetamine tablets for five months.

* * *

SOLDIERS' IDENTIFICATION TAGS

"The identification tag that every soldier in the German army must wear around his neck will henceforth indicate the blood group to which he belongs (information necessary for blood transfusions)," the regular Berlin correspondent of *The Journal of the American Medical Association* reports in the Feb. 24 issue.

Remember that the key man in the whole picture of cancer control is the general practitioner to whom patients come for periodic examinations or for advice about apparently harmless conditions.

SURGERY OF THE HIP*

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The success of any operation upon the hip will depend largely upon the extent to which mechanical and physiologic principles are observed in its performance. Since an adequate blood supply is essential to a favorable outcome, every effort should be made to avoid interference with the circulation. This being true, the capsule should always be incised at the junction with the acetabulum, or longitudinally and parallel with the neck of the femur, or both. Care must be exercised to protect the posterior capsular artery, as another important source of blood supply, the ligamentum teres, is frequently severed. In adults, a large portion of the neck is normally within the capsule, and is invested only by synovial membrane; inflammatory lesions, however, may incite an extensive soft tissue reaction which appreciably increases the blood supply. It is advisable, therefore, that stripping of this soft tissue be limited so far as is compatible with the mechanics of the operative procedure. In children, the inferior portion of the capsule is attached to the neck as far as the epiphysis and is also a minor source of blood supply. This should not be divided.

The blood supply can best be conserved by the anterior iliofemoral approach, as popularized by Smith-Petersen. The upper limb of this incision parallels the anterior portion of the iliac crest, and the lower limb extends between the tensor fasciae femoris and sartorius muscles. By dissection in the anatomic planes and stripping of the anterior portion of the gluteal muscles subperiosteally from the ilium, this approach permits wide exposure of the hip joint without damage to any part of the major blood vessels to the femoral head and neck or acetabulum. If extensive exposure of the acetabulum is desired, the muscular attachments may be stripped from the inner aspect of the ilium and all structures severed from the anterior iliac crest. In other approaches, such as the Kocher U-shaped incision, or the goblet incision, the posterior capsular artery is frequently severed, possibly leading to extensive degeneration of the head and neck of the femur.

The practical application of physiologic principles in surgery of the hip can best be illustrated by a consideration of some of the various affections for which surgical treatment is indicated.

Loss of support to the upper extremity of the femur, a serious, yet probably the most common disability, may be caused by a number of disorders, such as congenital dislocation of the hip, ununited fractures of the neck of the femur, pathologic dislocations incident to destructive processes, and tabes dorsalis. For this condition, two types of operations are suitable: (1) those whereby an actual osseous support is created, and (2) those whereby weight is thrown directly upon the lateral aspect of the pelvis, or a combined upper and pelvic support. If the defect is in the superior wall of the actabulum, as in congenital dislocation of the hip or changes secondary to poliomyelitis, a new actabulum may be formed by excavation, or an upper support may be provided by reflection of a shelf of bone outward from the ilium, or these methods may be combined. The greatest care must be taken to bring the femur well forward and in line with the acetabulum, or even anterior thereto, in order to prevent serious imbalance, a decided Trendelenburg's sign, and a typical backward lurching gait in a compensatory effort to obtain muscle balance and an even distribution of weight.

Excavation of the acetabulum is more satisfactory if the normal plane of the joint can be secured; otherwise, mere extension of the roof to a higher level materially improves the mechanics of the joint but does not restore normal muscle balance or function.

Less advantageous, though more feasible in certain cases of congenital dislocation of the hip is the operation of trochanteric osteotomy, or osteotomy at the level of the tuberosity of the ischium, to restore weight-bearing alignment. In the Lorenz procedure, the osteotomy is performed at the level of the lower border of the acetabulum, the lower fragment being displaced medially. This provides support directly to the upper extremity of the femur in the actabulum, and indirectly to the lateral aspect of the pelvis. The Schanz osteotomy, which is carried out at the level of the tuberosity of the ischium, causes medial angulation of the proximal fragment and allows the pelvis to rest against the oblique upper fragment on weight-bearing. These procedures, according to Putti, are not advisable until practically full growth is attained. The author is in accord with this opinion, as the element of growth obviously may change relationships.

The normal length of the extremity frequently may be restored by traction; on the other hand, the structures may be so firmly fixed that the head can be returned to the level of the acetabulum only by severance of the soft structures at open operation. Reduction must not only be effected, but must be maintained. In poliomyelitis, reduction may often be accomplished by the patient with little effort, the only problem being retention after reduction, whereas in congenital dislocation of the

* Presented before the Section on Surgery of the Indiana State Medical Association at the Fort Wayne meeting, October 11, 1939.

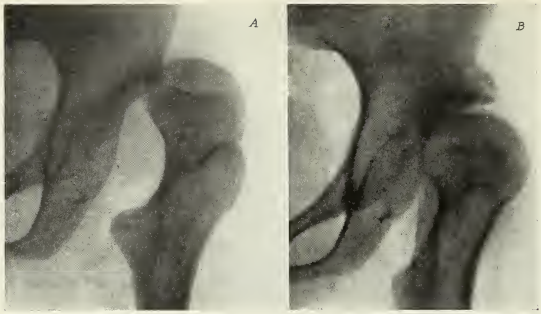


Figure 1. Paralytic dislocation of hip before and after shelf operation. Note shallow acetabulum with loss of superior support in pre-operative roentgenogram.

hip reduction is often difficult or impossible. When the upper extremity of the femur cannot be brought down to the level of the actabulum, either of the two types of operations described above for restoring support may be employed.

In coxa plana, or Legg-Perthe-Calve's disease, definite changes take place in the femoral head, probably as a result of impaired circulation. This affection is most frequently observed in children between the ages of five and nine years. The first stage is that of condensation; in the roentgenogram, the capital epiphysis is more dense than the surrounding bone. Microscopic examination by several authors in small series of cases has revealed aseptic necrosis of the head. The next stage is that of fragmentation, wherein tongue-like processes of granulation tissue enter the epiphysis in an attempt to effect organization. In the roentgenogram, the epiphysis consists of two or more fragments with alternating areas of condensation and rarefaction. During this stage, wherein bone is being absorbed by invading granulation tissue, the epiphysis is most vulnerable to mechanical forces, such as weight-bearing. Finally, the capital epiphysis undergoes a stage of healing, being entirely replaced by new bone and assuming a permanent fixed contour. If weight-bearing is prohibited, this evolutionary process may at times terminate in almost complete restoration of contour and normal function. If not properly treated, however, the femoral head may hypertrophy and the neck may become thick and short, leading to coxa malum.

Epiphyseal separation occurs most commonly in children between the ages of eleven and fourteen years, i.e., during the most active period of bone growth. At this time, the epiphysis has become more oblique, allowing greater stress at the epiphyseal cartilage on weight-bearing. The actual separation takes place in the metaphysis adjacent to the epiphysis. If the patient is observed soon after the separation, which seldom happens, the femoral head may be replaced in its normal position and held by either a cast or internal fixation. In neglected cases, however, epiphyseal coxa vara develops, requiring osteotomy and anatomic replacement, since the malposition cannot be broken up by forcible methods. When the condition has persisted for years, degenerative changes in the head and neck of the femur, similar

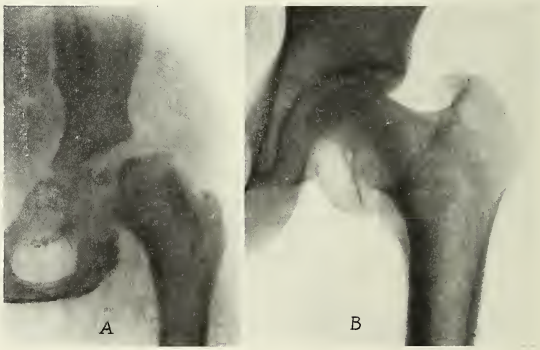


Figure 2. Coxa Plana (Legg-Perthe's disease): stage of fragmentation in 1913, and residual coxa vara in 1939. Recent physical examination showed excellent function.

to those which appear following coxa plana, are observed.

In fractures of the neck of the femur the effect of the blood supply is most clearly demonstrated. If the supply from the ligamentum teres is ample, the head will remain alive and will participate in the production of callus; in this event, however, osteogenesis is always deficient. If the blood supply is inadequate, the head becomes partially or totally necrotic. In many cases the blood supply is adequate to prevent necrosis of the head, though not to produce callus. A non-viable head is a sequestrum and maintains the same density as at the time of fracture, in contrast to the surrounding bone of the pelvis and distal fragment, which undergoes regional atrophy. Similar changes will occur when the blood supply is just sufficient to keep the head alive; under such circumstance, the viability of the head cannot be determined by the roentgenogram alone.

In fresh fractures of the femoral neck, maintenance of the corrected position by internal fixation is more successful than by any other method; not only is close apposition secured, facilitating the invasion of new bone along the line of fracture, but shearing force is eliminated and functional use of the limb promoted. Cast fixation, on the contrary, neither guarantees the integrity of the apposing fragments, nor eliminates shearing force, nor allows movement of other joints of the affected extremity. Whatever the type of fixation, at least six months should elapse before weight-bearing is permitted, and some kind of apparatus should be employed for a much longer period; callus in this region may remain pliable for a long time, and shearing force from weight-bearing and muscle pull may give rise to separation of the fragments and nonunion.

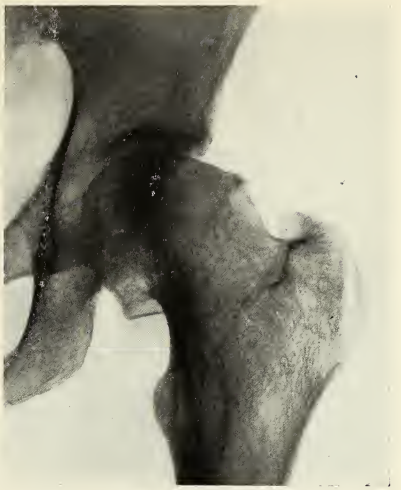


Figure 4. Old slipped upper femoral epiphysis, 16 years later.



Figure 3. End result in coxa plana, excellent function of hip 15 years after onset of symptoms.

In ununited fractures of the neck of the femur reconstructive measures may be undertaken to restore satisfactory weight-bearing. The procedure must be planned to meet the demands of the individual case, i. e., according to the status of the femoral head, the age, general condition, and economic status of the patient, as well as his future functional requirements.

In young, active individuals, the ends of the fragments may be freshened, anatomic reduction effected, and internal fixation applied by means of nails, pins, or a bone graft. Or, some type of reconstruction may be carried out. The Brackett operation, in which the femoral head is placed on the denuded neck, the Whitman reconstruction, wherein the femoral neck articulates with the acetabulum, the Colonna procedure, consisting of removal of the femoral head and insertion of the greater trochanter within the acetabulum, and the Albee operation, are all suitable.

In older, more debilitated patients who are poor surgical risks, the simpler palliative measure of osteotomy, which insures a satisfactory weight-bearing extremity with a moderate decrease in the range of motion, is the method of choice. The femur is divided at the level of the lesser trochanter and the shaft is placed beneath the femoral head



Figure 5. Fracture of neck of femur; 23 years later, end result following bone graft with probable substitution by new bone.

and fracture site. Frequently, because of the elimination of shearing stress, the fracture will unite following this procedure.

The effect of the blood supply is also well illustrated in traumatic dislocation. After early reduction, the structure of the head of the femur is, in many cases, normal, even though the ligamentum teres is always ruptured; in other cases, the head disintegrates, presumably from interruption of the blood supply through the posterior capsular artery.

In old unreduced dislocations, the head usually retains its normal density and contour. This may be explained by the fact that the posterior capsular artery remains intact or that the numerous blood vessels from the surrounding soft tissues rapidly invade the head and neck, preventing necrosis. Within two or three weeks after dislocation, the cartilage of the head undergoes degeneration and may become detached en masse; this may be caused by the loss of the action of the synovial fluid, which is derived indirectly from the circulation. In such cases, restoration of normal function is exceedingly rare after reduction.

In acute pyogenic infections of the hip joint, the reaction varies according to the age of the individual. In infancy, a pyogenic infection involving the epiphysis may be so rapidly disseminated through the joint that the original site of invasion cannot be determined. On the contrary, in complete pathologic dislocation without destruction of the epiphysis, one may assume that the epiphysis is not involved and the process is an acute infection of the joint proper. Since the capsule envelops not only the epiphysis, but a large portion of the neck as well, invasion of both is not uncommon, and osteomyelitis and epiphyseal separation frequently ensue. Distention of the capsule from pyogenic exudate often causes complete dislocation of the hip in children; the younger the child, the more likely the dislocation. If the dislocation is discovered at once, reduction accomplished, and efficient drainage instituted, a surprisingly satisfactory contour and relationship may often be restored. Delayed reduction causes such extensive changes in the bone and surrounding soft structures that permanent disability may be anticipated.

In adults, as in children, the capsule encloses a large portion of the neck of the femur; infection, however, is usually confined to the joint proper, the bone of the neck being more resistant to infection. Dislocation occurs only when the process advances and destroys the roof of the acetabulum or a large portion of the head or both.

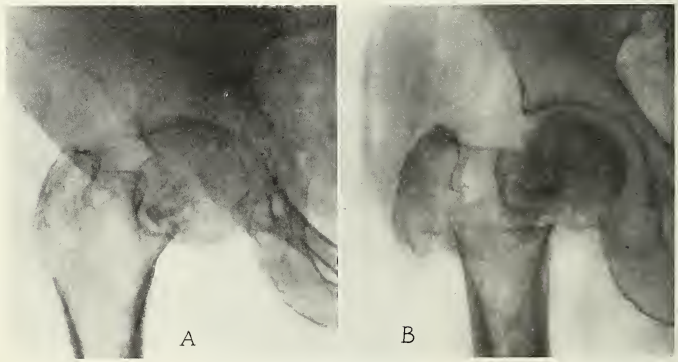


Figure 6. Ununited fracture of neck of femur, bone united following osteotomy at level of lower border of acetabulum.

In children, the epiphysis frequently becomes necrotic, since the blood supply is greatly diminished through impairment of the ligamentum teres. In those beyond the age of twelve years the head of the bone practically always dies, becomes a sequestrum and separates, and ultimately must be excised in order to promote healing. This process is induced, not only by the virulent pyogenic infection of the epiphysis and impairment of the circulation, but also by the declination of the plane of the epiphysis as age advances, and the consequent shearing action. In younger children this feature is not present.

Monarticular osteoarthritis of the hip is characterized by hypertrophic and proliferative changes in both the head of the femur and in the acetabulum. Impaired circulation gives rise to the formation of cysts in the femoral head. The synovial membrane is often atrophic and scarred. Osteoarthritis may result from trauma, or from degenerative changes in the head following slipped epiphysis and coxa plana, or those accompanying old age incident to a previous infection of the hip joint, or from altered static relations in the joints of the lower extremity.

Four types of operations are commonly employed for osteoarthritis of the hip: (1) excision of osteophytes from the head or acetabulum, (2) reconstruction, (3) subtrochanteric osteotomy, and (4) fusion.

(1) Operations to restore the head to normal size and dimension are rarely satisfactory because of the poor quality of the bone. Excision of the anterior wall of the acetabulum, or acetabuloplasty (Smith-Petersen), which permits free play of the head, gives a much better prospect of success. (2) Reconstruction consists of excision of the head and possibly of the neck, thereby producing an articulation between the acetabulum and the neck or trochanter. The abductor muscles, with or without their bony insertions, are attached to the trochanter at a lower level. This will usually permit a fair degree of motion but is far from satisfactory from the standpoint of endurance. (3) Subtrochanteric osteotomy, displacement of the fragments medially, and rotation of the head laterally changes the relationship of the articular surfaces and the line of weight-bearing, and eliminates contact between osteophytes at the joint margins. (4) Fusion, or the induction of ankylosis, is accomplished by excision of the articular cartilage and immobilzation of the joint by internal fixation with either an autogenous bone graft or the three-flanged nail of Smith-Petersen. Union is exceedingly difficult to obtain with the bone graft; in many cases free motion and a fair arthroplasty is the outcome. The Smith-Petersen nail, advocated by Watson-Jones for this purpose, provides more complete fixation and thereby facilitates osseous union.

The indications for these four types of operations differ. Since a majority of patients with osteoarthritis of the hip are beyond middle age, the lesion is frequently associated with a generalized osteoarthritis, particularly of the spine. In this event, only operations which will permit motion of the hip are suitable. If there are no symptoms referable to the spine and motion of the spine is free, fusion of the hip joint, when successful, affords by far the better prospect of relief.



Figure 7. End result of arthroplasty following fracture of pelvis and head of femur.

In monarticular osteoarthritis the hip usually becomes a hinge joint fixed in external rotation; this deformity must be corrected if normal alignment is to be restored. This may often be accomplished by a reconstruction operation on the hip alone; otherwise, a supracondylar osteotomy just above the knee is advisable. In young, robust individuals both operations may be carried out at one time; in those who present a graver risk, the osteotomy should not be undertaken until after the reconstruction wound has healed.

The end results of arthroplasties of the hip in monarticular ankylosis as a result of pyogenic infection or trauma depend upon several factors: (1) A foundation of normal bone must be made for the articular surface; if subarticular cysts or dense sclerotic bone are present, this may necessitate resection of a considerable portion of the head. (2) During the operation, care must be taken to preserve as much as possible of the capsular blood supply, since the ligamentum teres is severed during remodeling of the head. (3) Mechanically, there should be adequate superior support and free play of the femoral head within the acetabulum.

After arthroplasty, a new joint is formed by movement or friction between the osseous surfaces.

The process is similar to that which is often observed in the hip following a destructive lesion, and in ununited fractures of the long bones. Exploration after the elapse of one or more years will reveal a joint fluid and an investment of the joint with fibrocartilage, which extends into the subarticular spaces. The subarticular osseous structure is gradually consolidated by use and functional adaptation, providing support for the articular surfaces.

In conclusion, every surgical procedure on the hip joint is an individual problem, to be undertaken with serious regard for both mechanical and physiopathologic principles. When these principles are faithfully observed, better results may be anticipated.

COLLAPSE THERAPY IN PULMONARY TUBERCULOSIS*

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Collapse therapy in the treatment of pulmonary tuberculosis presents an ever widening field. New means of bringing about the collapse of the lung and improvement in the technique of the older ideas are springing up continually. These present something of a revelation to those who, just a relatively short time ago, held the thought that patients with pulmonary tuberculosis were poor surgical risks.

Artificial pneumothorax is the collapse procedure which is resorted to most frequently and, when successful, is the method which produces the best collapse of the lung. Unfortunately, it is successful in only about one-third of the patients on whom it is attempted. This leaves a large group for which other methods of collapse have to be considered.

The material for this study consisted of 1027 patients with pulmonary tuberculosis who had unilateral pneumothorax attempted or induced and 144 patients who had pneumothorax attempted or induced on both sides. These patients were studied after they had been discharged from the sanatorium for a period varying from one year to over twenty years and the results are recorded. Their ages ranged from 7 to 74 years, but the greater part (72.5%) were in the prime of life, 20 to 40 years. The ratio of men to women was 1 to 1.54.

When artificial pneumothorax was not satisfactory, we endeavored to bring about collapse of the lung by the following procedures: phrenic nerve surgery, which consisted of crushing the phrenic nerve or extracting the nerve or removing a portion of it; thoracoplasty, which for the most part was the paravertebral type done in two to three separate stages (anterolateral stages were performed when necessary); extra-pleural pneumonolysis which consisted of inserting paraffin extrapleurally in the upper portion of the thorax; intra-pleural pneumonolysis which consisted of cutting adhesions by the aid of thoracopic vision, although a few patients had adhesions severed by the open method; intercostal neurectomy which was performed on one patient.

The above surgical procedures were used separately or in combination, and either as an aid to artificial pneumothorax or to supplement it. For the purpose of presentation, we have divided this material into two groups; those patients who had unilateral collapse and those who had bilateral collapse.

UNILATERAL COLLAPSE

There were 1027 patients on whom unilateral pneumothorax was considered to be the treatment of choice. However, when pneumothorax was attempted, it was found that there was no free pleural space in 249 patients. In 346 patients the pneumothorax obtained was classified as unsatisfactory because it did not control the lesions or the symptoms of these patients. There were 111 who received some benefit from their pneumothorax, i.e., either the lesion or the symptoms were partially controlled. These patients were classed as partially satisfactory. There were 321 patients classed as satisfactory because both their lesions and their symptoms were controlled by pneumothorax.

Our patients were also divided according to the National Tuberculosis Association classification in

TABLE I
PNEUMOTHORAX ATTEMPTED OR INDUCED
1027 Patients
1 to 20 Years After Discharge

	Living				Dead	
	Working		Not Working			
249 Patients No Pleural Space	95	38.8%	47	18.4%	107	42.8%
346 Patients Unsatisfactory	80	23.1%	37	10.6%	229	66.2%
111 Patients Partially Satisfactoy	63	56.8%	13	12.6%	35	30.6%
321 Patients Satisfactory	263	81.9%	43	13.4%	15	4.2%

* Presented before the Section on Surgery of the Indiana State Medical Association at the Fort Wayne meeting, October 11, 1939.

the following manner: Minimal, 2%; Moderately Advanced, 34.9%; Far Advanced, 63%.

As this is a follow up study we have here considered the patients as we found them 1 to 20 years following their discharge from Glen Lake Sanatorium (Oak Terrace, Minnesota). Our methods of following our patients were by annual letters and questionnaires, by visits to the patients' homes and, when possible, by consultation with their doctors. We have had information within the past two years of 92.7% of our living patients. Of those not heard from within this time we have recorded the information as given us on their last report.

Table I shows the patients divided into the four groups previously described. In the "No Free Pleural Space" group we found that 42.8% were dead; ninety-five or 38.8% were working and 18.4% were living but not working.

In the "Unsatisfactory" group there were 23.1% working, 10.6% living but not working, and 66.2% dead.

The value of surgical procedures other than artificial pneumothorax can be appreciated by considering these two groups ("No Pleural Space" group and "Unsatisfactory" group) because it was in these groups that most of the surgery was performed. Three years after pneumothorax was attempted or induced, a comparison of these two groups was made at which time it was found that of the 249* who received no surgery, 74.6% were dead, while in the 346* who had further surgery, only 28% were dead. The patients in each group were quite comparable. They were treated at Glen Lake Sanatorium over the same period of time. The age groups, sex, nationalities, and the N.T.A. classification were all very similar.

The specific procedures performed on these patients were as follows: 160 had some form of phrenic nerve surgery, 54 had thoracoplasty alone, 125 had both phrenic nerve surgery and thoracoplasty and 7 others had combinations of the various methods. It is our opinion, therefore, that every effort should be made to give the suitable tuberculosis patient the benefit of collapse therapy and if this can be obtained by artificial pneumothorax, all well and good; if not, other collapse should be tried.

Our experience with those patients who received benefit from their artificial pneumothorax has been much better than with those who did not. This is brought out in the remaining two groups in Table I, considering those 111 patients who comprise the "Partially Satisfactory" group. We found on the completion of our study that 56.8% were working, 12.6% were living but not working, and 30.6% were dead at the time of their last report, while in the 321 patients comprising the "Satisfactory" group we found that 81.9% were working, 13.4% were living but not working, and only 4.2% were dead.

* By coincidence the same totals in each group. There were, however, patients from each group who were operated.

TABLE II

RESULTS WITH RELATION TO TIME

1027 Patients

Years After Pneumothorax Attempted or Induced	Working		Living Not Working		Dead	
3 years or less 471 Patients	105	22.2%	56	12.0%	310	65.8%
4 to 6 years 248 Patients	158	63.8%	37	14.8%	53	21.3%
7 to 10 years 220 Patients	170	77.3%	34	15.4%	16	7.3%
10 years or more 88 Patients	69	78.4%	10	11.4%	9	10.2%

It will be noted that in those patients who had the most satisfactory collapse of their lungs, there were the greatest number of patients who were working and the fewer who were dead. Likewise, among these patients there was much less need for further surgical collapse procedures. Of the 263 patients working in the "Satisfactory" group it was found that in only 50 had it been necessary to perform other surgical procedures and in 44 of these 50 the operations were performed between the fourth and the tenth year after pneumothorax was started.

The type of surgery performed in the "Partially Satisfactory" and "Satisfactory" groups can roughly be divided into that which aided the artificial pneumothorax such as severing of adhesions and crushing the phrenic nerve, procedures which were done comparatively early in the pneumothorax treatment; and that which replaced the pneumothorax such as thoracoplasty either alone or in combination with other procedures.

RESULTS WITH RELATION TO TIME

With a chronic disease such as tuberculosis, the time element is an important and interesting factor. Our material was, therefore, studied with respect to the time which had elapsed after the pneumothorax was attempted or induced. (Table II.) There were 471 patients who were followed for three years or less, 22.29% were working when last heard from, 12% were living but not working, and 307 or 65.8% were dead. Of those who were dead 282 were patients who either did not have any free pleural space or whose pneumothorax was unsatisfactory. There were 248 patients who were followed from 4 to 6 years, 63.85% or 158 patients were working. One hundred and two of these were in the groups with the better collapse, i.e., "Partially Satisfactory" and "Satisfactory" groups. There were 220 patients who were followed from 7 to 10 years, 77.3% were working at the time of the last report. Eighty-eight patients were followed for 10 or more years after the institution of pneumothorax, 78.4% of whom were working. Here again, the majority of those working received the greatest benefit from pneumothorax. This further brings out the need of

TABLE III

OBSERVATION OF CONTRALATERAL LUNG
20 Year Period

Lesion in Contra. Lung When Pnx. Was Started	Total	Remain Neg.	No Chg.	Changes in Contralateral Lesion: Tb. Impr.	Tb. Unstable	Tb. Incr.	Tb. Devel.	No Record
Exudative	6		1	5				
Fibrocaseous	24		3	10	3	7		1
Fibroid	413		201	122	23	64		3
Negative	135	126					8	1
No Record	13	2	2	137				9
Total	591	128	207	274	26	71	8	14
		21.66%	35.03%	23.18%	4.40%	12.01%	1.35%	2.37%

satisfactorily collapsing the lung. It is our opinion that if it cannot be done by pneumothorax, the easiest and simplest method, then other procedures should be followed which will give as satisfactory collapse as possible.

EFFECT ON THE CONTRALATERAL LUNG

In considering the collapse of one lung, the surgeon and the physician alike must have knowledge of the condition of the contralateral lung and the effect of the collapse upon the latter. The ideal case, that is the patient with no tuberculosis in the contralateral lung, is seldom found. The extent and type of the lesions in the contralateral lung must influence the choice of the collapse of the more affected side. With a better knowledge of the collapse therapy there has been more and more a willingness on the part of both the surgeon and the physician to consider patients with lesions in the contralateral lung who would not have been accepted for collapse procedures a relatively short time ago.

In an attempt to show the effect of collapse therapy of one lung on the contralateral lung, we have studied 591 patients who had artificial pneumothorax on one side. Space does not permit the discussion of the details and variables involved in this study, but Table III does show in general the effect in the contralateral lung.

It will be seen in those 6 patients who had exudative lesions (soft or pneumonic type) in the contralateral lung that 5 improved and 1 showed no change during treatment by artificial pneumothorax on the original side.

Of the 24 patients who had fibrocaseous lesions (cavities in addition to fibrosis) 3 showed no change, 10 improved, in 3 patients the lesions were unstable, i.e., increased, then decreased or vice versa, and 7 patients showed definite extension of the disease.

There were 413 patients whose lesions in the contralateral lung were fibroid (lesions discrete, clear cut), 201 of which did not change during artificial pneumothorax on the opposite side; 122 patients whose lesions improved, 23 patients who had unstable lesions and 64 whose lesions definitely increased during the course of treatment.

There were 135 patients who had a negative contralateral lung and of this number 126 remained negative and 8 developed tuberculosis.

Summing up this table which deals only with pneumothorax we find that 8 patients developed tuberculosis and 71 patients or 12% of the entire group or 15% of those who had lesions showed an increase of their disease in the contralateral lung. It should be emphasized that the increase in lesions here recorded were discovered by routine x-rays (at least every 3 months) and that none of them were extensive enough to necessitate the bilateral collapse.

The fact that pneumothorax on one side did not aggravate a higher percent of lesions in the contralateral lung is an interesting one, because of the theory that rest plays such a big part in the treatment of tuberculosis. In line with this theory it is assumed that pneumothorax on one side causes compensatory movements of the opposite lung. Therefore, one would expect aggravations of the lesions in the contralateral lung. Clinical experience tends to refute this theory. Our experience with other forms of collapse parallels that of artificial pneumothorax.

TABLE IV

BILATERAL COLLAPSE
Period From Original Pneumothorax to Time of Last Report

Group		3 yrs or less			4-6 yrs.			7-10 yrs.			10 yrs. or more		
		W	L	D	W	L	D	W	L	D	W	L	D
Bilateral Pnx. Only	78	2	4	34	4	11	6	5	3	2	6	1	0
Bilateral Pnx. and Other Collapse Subsequent	45	2	1	10	1	4	9	2	4	4	5	3	0
Unilateral Pnx. and Other Collapse on Opposite Side	18	2	0	6	0	3	3	1	1	0	2	0	0
No Free Pleural Space Either Side Bilateral Collapse	3	0	0	0	1	0	0	0	2	0	0	0	0
Total	144	6	5	50	6	18	18	8	10	6	13	4	0

W—Working; L—Living, Not Working; D—Dead.

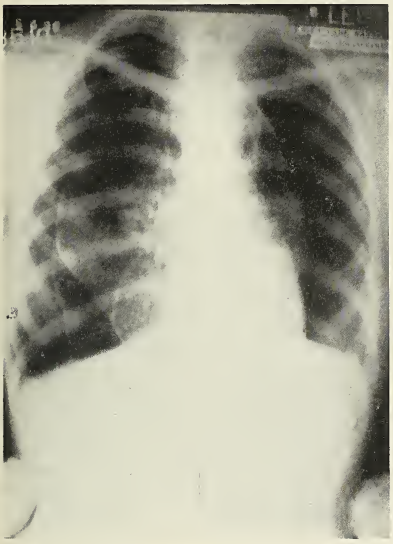
BILATERAL COLLAPSE

The partial collapse of both lungs is not only a possible but a practical procedure in patients who have active tuberculosis in each lung. Our experience, however, deals more particularly with that group of patients who have had an unilateral collapse of one sort or another and in whose contralateral lung tuberculosis has either developed or their previous lesions have become activated.

Various combinations of surgical procedures may be used to bring about the collapse of each of the lungs. A few illustrative cases are here described to show some of the combinations used on the patients in this study.

There were also patients with bilateral pneumothorax plus intrapleural pneumonolysis on one side and others with thoracoplasty on one side and pneumothorax and intrapleural pneumonolysis on the other. There were no patients with bilateral thoracoplasty among those 144 here described, but this procedure, we believe, is not an impossible nor impractical means of collapse in suitable cases.

Fig. 1

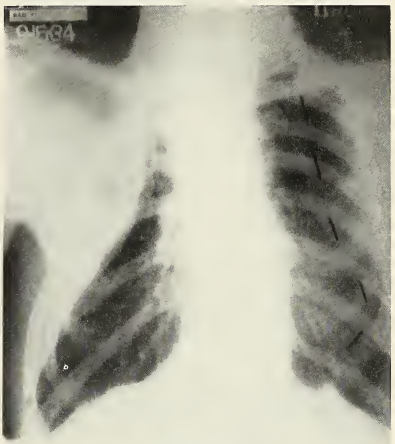


Bilateral Pneumothorax
Bilateral Phrenemphraxis

M. C. had four years of sanatorium care, during which time she had four phrenic crushings on the left side prior to pneumothorax and on the right side the phrenic nerve was crushed once prior to the institution of pneumothorax (this case is the exception to our established rule of attempting pneumothorax before other procedures are tried). This young lady has about 50% collapse of the lung on each side and a vital capacity of 1000 cc. and is not obviously short of breath. She has been working now under these conditions for about 4 years.

Patients whose disease is extensive enough to warrant bilateral collapse therapy cannot be expected, by and large, to have the longevity that patients with lesser amounts of disease have. Then, too, the complications of bilateral collapse, especially those of pneumothorax, are often contributory factors in producing death and these are naturally more frequent with bilateral collapse than with unilateral collapse. At the completion of our study we found that 51% of our 144 patients were dead. On the other hand 24% were well and working who, we believe, would not have been in this condition had collapse not been instituted. Table IV shows the length of observation and the condition when last heard from and the type of collapse of our patients who had bilateral collapse.

Fig. 2



Pneumothorax—Left
Thoracoplasty—Right

G. K.—Pneumothorax was started on the left side in 1928 because of the large cavity and repeated hemorrhages. A two stage thoracoplasty was done in 1934 after an attempted pneumothorax, because of cavitation and positive sputum. Pneumothorax is still continued and the patient has been working 3 years.

CONCLUSION

The treatment of tuberculosis no longer consists of sending a tuberculous individual to the country or to a different climate but one which calls for constant attention and careful management and when collapse therapy is considered, the treatment requires complete cooperation between the physician and the surgeon. Chest surgery is a distinct branch of surgery and one that requires considerable time and study and should not be

Fig. 3
Thoracoplasty and Phrenic Nerve Crushing



Pneumothorax—Left
Right—Pneumothorax

G. L.—The patient started pneumothorax on the left side in 1928. She worked some for several years and subsequently developed activity in the right lung. Pneumothorax was carried on for 6 months in 1934, but was unsatisfactory. This was followed by four stages of thoracoplasty and three phrenic nerve crushings.

undertaken unless these requirements have been fulfilled.

DISCUSSION

PAUL D. CRIMM, M.D. (Evansville): This report on 1,171 patients, upon whom pneumothorax was either performed or attempted, represents years of tedious and careful work. Three hundred and twenty-one (321) or 31.2% of the 1,027 unilateral cases obtained satisfactory results. In other words, their subjective symptoms and tuberculous lesions were controlled by this method of collapse therapy. Such a reversible procedure as pneumothorax is always more conservative and hence more desirable than an irreversible one like thoracoplasty.

Dr. Jennings reiterates the fact that lesions in both lungs do not contraindicate artificial pneumothorax. If the infiltration in the opposite lung becomes aggravated, bilateral pneumothorax is certainly indicated. Most patients tolerate bilateral pneumothorax very well if the patient receives adequate attention.

Fig. 4



Bilateral Pneumonolysis (Paraffin Pack)

Patient was first seen in 1932 when pneumothorax was attempted on the right side. No free pleural space was found so a pneumonolysis with paraffin pack was done. He was able to work about a year. In 1935 the same procedure had to be followed on the left side. He has been well and working now for about two years.

Four hundred and thirty-two (432) of these patients were benefited by pneumothorax, which brings out the point that pneumothorax even though partial and carried for only a short time does improve the patient for further collapse therapy. Most of these cases discontinued their pneumothorax in three years, or less, while some went for a duration of ten years. Pneumothorax, however, should not be continued so long that lung re-expansion is prohibited.

As Dr. Jennings states, a certain number of all these cases who had successful pneumothorax had to have other operative procedures and most of those who did not receive pneumothorax but who were good operative risks had to have some other operative procedure performed. In these cases, of course, the crux of the situation is to decide what type of procedure is appropriate for each patient. Each individual case presents a separate entity as far as selection of procedure and the proper time for performing the same. Pneumothorax should always be attempted before any other operative procedure is selected.

As far as pneumothorax is concerned, a great many men believe that the lung should be collapsed completely. I have tended more and more to collapse the lung partially, providing the partial collapse will give the patient sputum conversion. Many lungs which are collapsed completely will never re-expand, especially those which have been

subjected to repeated collections of fluid. In the proper hands artificial pneumothorax should be used, not only as the initial collapse therapy procedure, but also should be utilized in collapsing minimal lesions. There is too much risk involved in permitting a patient to cure tuberculosis by bed-rest alone, unless it is clinically indicated. Pneumothorax should always be considered as a safe therapeutic adjunct in the majority of cases.

H. O. Bruggeman, M.D. (Fort Wayne): I would like to ask Dr. Jennings a question. How does collapsing the one lung, throwing all the work on the contralateral lung, improve the condition in the contralateral lung?

Dr. Jennings (closing): I wish I could answer that. I don't know. I can tell you what we tell our patients. We say that collapsing the lung reduces the toxemia and therefore allows healing to take place. But that is a mighty poor answer for a medical group. I simply reported the facts, and I don't know the physiology involved. I wish I did, because it was quite a revelation to see the relatively small number that broke down. It is quite in contrast to what you would expect. Throwing all the work on a diseased contralateral lung, you would expect, with rest as the criterion which we have preached and talked about for years in the treatment of tuberculosis, that throwing more work on the contralateral lung would cause an increase in trouble.

THE PHYSICIAN IN THE SCHOOLS

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For many years physicians have been employed for service in schools, but during these many years the purposes and functions of the physicians' program have undergone numerous changes. Many of us can remember the time when "medical inspectors" were employed for a program indicated by their title. They inspected pupils for signs of communicable disease but gave little attention to what happened after exclusion or to what impressions were created during the inspection. Their work was an isolated activity with little connection with the health activities of the rest of the school staff. The term "medical inspector" and the type of program he personified have been gradually supplanted by school health service programs carried on by "school physicians." Although the terms "school health service" and "school physicians" are now used throughout the country, the program in which the physician participates could more appropriately be labelled "health guidance and protection" and the physician a "school medical advisor."

Present-day school health programs are characterized by two tendencies. One is to consider the health objectives of the school as something to which all members of the school staff contribute. The other directs attention to what pupils, parents and teachers learn from their contacts with physicians, nurses, and other health specialists. This latter tendency recognizes the health education aspects of individual conferences between pupils and physicians and attempts to plan these conferences so as to obtain the greatest possible educational value.

In a school with an up-to-date health program we find the work of the physician closely coordinated with the work of other members of the school staff. We find, for example, many different people with a part in school efforts to prevent the spread of communicable disease. The principal sees that some person is responsible for excluding pupils who seem sick as well as re-admitting those returning after sickness. Each classroom teacher inspects pupils at the beginning of school and initiates procedures causing sick pupils to be isolated and then sent home. The physician or nurse gives each teacher a list of signs and symptoms indicative of communicable disease and emphasizes the importance of children staying at home with beginning colds or severe colds. Kindergarten teachers and others who assist with the enrollment of pupils when they first enter school ask parents about vaccination and diphtheria immunization, and make it quite clear that the school expects children to receive this care from their physician long before enrolling in school. In preparation for tuberculin testing in the high school, teachers of different subjects see that pupils are taught the cause of tuberculosis, the history of Robert Koch, the purpose of the tests, the meaning of various types of reactions, the necessity for x-raying positive reactors, and the importance of tuberculosis to high-school age pupils. We can generalize about these activities by saying that in the up-to-date school health program the physician advises regarding school efforts to prevent the spread of communicable diseases and, through the principal or superintendent of schools, arranges for the utilization of all members of the school staff in this program.

In a similar way, many members of the school staff are concerned with the care of accidents occurring at school. Naturally, accidents will happen at times when neither a physician nor a nurse is at the building. In preparation for these, written instructions should be available for all teachers outlining the emergency measures to be taken and the procedure for getting a physician if one is needed. These written instructions should be prepared by the physician, or at least have his approval. In

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general, these instructions will outline approved first aid measures and will acknowledge the school responsibility for notifying parents of accidents, and getting pupils to their home after immediate emergency care has been given. They will clearly state that treatment other than immediate first aid is a responsibility of parents and obtainable from their private physician or through the facilities which the community has provided for the care of needy individuals.

Schools are faced with problems of what to do with pupils who become sick at school. It is not expected that a physician or nurse will see all such pupils, but it is recommended that the physician giving service at the school prepare written recommendations as to what to do and what not to do with these cases. Certainly the school should not encourage self-diagnosis and self-medication by permitting aspirin to be given promiscuously for pain, oil of cloves for toothache, or sodium bicarbonate or essence of peppermint for abdominal pain. The school which permits the dispensing of these medications by physician, nurse, or teacher is not only teaching that self-medication is an acceptable procedure but is losing an excellent opportunity to teach the correct way of caring for sickness.

The present day emphasis on the educational value of the work of the physician in the school has resulted in several changes in examination procedures. Among these we may mention the common practice of inviting and urging parents to be present when elementary pupils are to be examined. It takes time to talk with parents, to tell them the results of the examination and to plan with them a method for getting whatever treatment may be required. Even though a pupil has no condition requiring treatment, it takes time to tell this to the parent and to answer the questions which she raises. But this time must be taken if the physician is to use his contacts with the parent as an opportunity for health education. The parents' questions will vary. One will want to know if children's baby teeth are important, another what the Schick Test tells, another why the school is interested in whether or not a child has had rheumatic fever. Questions will be asked regarding tuberculosis, eating habits of children, the results of bad tonsils, the importance of weight and posture, the value of mouth washes and the causes of impaired hearing. These are all questions for which the school medical advisor should be prepared and which he should answer in a friendly, professional, sympathetic and scientific manner. He may even refer parents to recent articles on these topics in *Hygeia* or other reliable sources of desirable health information for laymen.

Of course, some parents or pupils will want the school medical advisor to prescribe treatment or give a specific diagnosis, but the experienced physician will tactfully ask who the family physician is, or from which clinic they receive care, and then tell them that that is the best place to get further treatment.

In addition to answering questions which parents or pupils ask, the physician who thinks of the health education opportunities of his work will, of his own initiative, present certain ideas about health to those with whom he comes in contact. When discussing with a parent the communicable diseases a pupil has had, he will find time to tell the mother that a sick child should be kept at home and isolated from all other children until it is certain the sickness is not of a communicable nature. When a pupil tells of having had abdominal pain, the physician takes the opportunity of teaching that abdominal pain may mean appendicitis and therefore laxatives should be avoided. The presence of small dressings, and of cuts or abrasions, gives him an opportunity for discussing methods of preventing infections in minor wounds.

Many of the things which the physician tells parents or pupils are things which may at some time be discussed by the teacher in her program of health instruction, but the physician's comments on health matters mean much more to pupils than anything the teacher can say. Also, the teacher can use the physician's comments to introduce some of her health instruction.

The matter of physician-pupil and physician-parent rapport is of great importance, because without doubt physicians' recommendations have value in direct proportion to the rapport developed. Rapport is developed partly through the friendly conversation and informal discussion referred to previously and partly through the general attitude of the physician. The physician who is cheerful, helpful, friendly, reserved and sympathetic, has a fine foundation on which to build a health guidance program with educational outcomes. In addition to these attitudes, good physician-parent rapport requires procedures so orderly and unhurried that there is no indication of tenseness or strain and facilities which permit privacy during examinations and conversations.

When attention is given to the educational outcomes of the physicians' work in the school, it is found that children can not be examined at the rate which prevailed when "medical inspections" were made. Consequently the present trend is to decrease the frequency of school examinations—sometimes to one examination every three years—but to be sure that those who are examined understand fully the findings and secure the treatment which is needed. This is a practical application of the viewpoint that one function of a health guidance program is to help pupils get needed care rather than to see that a certain number of examinations are made. From the administrative angle this change means that the school medical advisor is employed not to examine a certain number of pupils—and certainly not paid a per capita fee for each examination—but is employed for a certain number of hours of service.

During the time he is employed by the schools the physician may be asked to contribute to the school health program in many ways. Of course a

considerable part of his time may be given to examinations, but these examinations may not all be of a routine character. Some will be made to secure his opinion as to whether or not there are health factors responsible for the poor school record of certain pupils. Others will be for determining what program adjustments are desirable for a group of pupils with poor hearing or poor vision. In other words, should lip-reading instruction be provided, or a sight-saving class organized? What adaptations should be made in the physical education programs of pupils who have orthopedic defects or organic heart disease? How does drinking milk in school in the middle of the morning affect pupil health? Does health protection require that young pupils have a rest period at school? In addition to these problems the physician, as indicated previously, may be asked to advise the principal regarding communicable disease prevention measures, the availability of treatment facilities, and school measures recommended for those who become suddenly sick while in class. Problems of sanitation may likewise be referred to the physician and his advice sought regarding standards for lighting, seating, heating, and drinking fountains as well as the general cleanliness of classrooms, cafeterias, swimming pools and gymnasiums. He may be asked to meet with teacher committees regarding the scientific accuracy of health instruction materials, the health interests and needs which he has observed in his conferences and examinations as well as his observations of health problems needing attention. The physician will be asked, in many cases, to coordinate school health activities with general community health programs. These varied activities together with the educational approach to health examinations nullify attempts to measure the health guidance program of a physician by the number of pupils examined.

Whether or not a school medical advisor is asked to participate in all of the activities suggested in the previous paragraph, will depend on many factors. One will be the physician's preparation and general ability to integrate medical, public health and educational ideas. Another will be the disposition and personality of the physician. Still another will be the general philosophy of the school principal including his understanding of the place of health in the general objectives of education and his interest in having his school develop an adequate, modern school health program. It is only when the school principal understands the proper functions and possibilities of the school health program that the physician will be asked for advice on the many health problems of children as well as the changes in school programs which these problems necessitate. The principal who uses his school medical advisor for varied activities will provide time for this service and will recognize that such advice may be more valuable than a few more routine examinations. Because of the importance of the school principal in any school health program, it is essential for the physician in the schools to keep this official informed of general policies for the program, the results obtained, the needs of children as he sees them, and further possibilities for protecting and educating pupils.

This discussion of school health guidance would be quite incomplete if no reference were made to relationships between private physicians and physicians in the school. In some communities there has been lack of harmony, if not actual antagonism, between private physicians and those engaged in the school health program. Most of these situations are due to the physician in the school prescribing treatment, or otherwise interfering with the prerogatives of the private physician or to ignorance of the private physician regarding the purposes of the school health program. If the physician in the school prescribes treatment to all who ask his advice or makes specific diagnoses, or fails to respect and develop the proper relationship of a pupil with his private physician, or in any other manner places himself in a position antagonistic to the private physician, he can not expect the support of his colleagues. The modern school health program, however, does not place the physician in the school in competition with the private physician; the medical advisor in the school does all he can to direct pupils in need of care to their private physician. If in any community a lack of harmony is due to the private physician not knowing about the school health program, the school medical advisor or some other school official should present to the County Medical Society a resume of school health policies and procedures. When private physicians understand that the program of the school medical advisor is one of guidance and education rather than one of treatment, and that he advises principals and teachers regarding the health supervision of pupils during their stay at school and the educational adjustment which may be required by those with severe defects, they will give full cooperation to the school program. Most well-organized modern school health programs now enjoy the full confidence, respect and cooperation of the entire medical profession; where this feeling does not exist it can be obtained through cooperative discussion and planning with leaders of the medical profession.

Potential opportunities for helping school children through a program of health guidance and protection are almost limitless, but the conversion of these potentialities into realities requires a carefully planned program, personnel which is well-trained, tactful, sympathetic and aware of the educational implications of their work. It is extremely gratifying to see an increased interest in many places in these educational implications and it is certain that continued efforts along educational and guidance lines will lead us nearer the goal of having parents and children well-informed in the field of health, ready to accept their own responsibilities in this direction and willing to cooperate with others in public health efforts.

THE OPERATION OF A VENEREAL CLINIC*

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EVANSVILLE

When considering the operation of a venereal clinic, it must be remembered that each locality has its own problems and that no one set of rules will fit all communities. However, there are certain fundamentals that apply to all.

All venereal clinics should be established as a part of the local health department. Venereal diseases are a public health problem since they are communicable diseases. In fact, since we are considering the type of clinic that is conducted at public expense, it should be managed so as to give the greatest benefit possible to the public. By making it a part of the local health department, the powers of that office are made available for its guidance.

The expense of maintenance should be included in the budget of the health department. It should come from taxation rather than subscription because the good results to be obtained are for the general good of the community. So long as the expenses are paid from local treasuries, just that long will the local authorities be able to dictate the policies. When money is accepted from other sources, a certain amount of dictation must be accepted therewith. While it is desirable that there be cooperation between the different health jurisdictions, it also must be considered that those on the local job should know the local conditions and be better able to handle them more satisfactorily than would result from directions received from a person who has never been nearer to the local situation than a desk several hundred miles distant. The State Department of Health and the U. S. P. H. S. should be available for counsel and advice, but, in the last analysis, the final decision should rest with the local authority.

The location of the clinic should be such that the patients may come and go with as little publicity as possible. A location in a building where there are quite a few people entering and leaving on other business is desirable.

Eligibility of patients is perhaps one of the hardest of all the problems confronting those in charge of a clinic. Unfortunately there is no hard and fast rule that can be applied to all patients. There seems to be no criterion by which we can say that this patient should have clinic treatment and that one shall not. One method is to have the patient present a note signed by his physician that he should receive treatment at the clinic. This is a very good method and should be honored by those in charge in any event, for the family physician should know the circumstances of a patient before issuing such notes. Patients referred by other health jurisdictions should be accepted, as should those indigents referred by township trustees, penal institutions and social agencies. Care must be exercised to eliminate those patients from receiving free treatment who may be able to afford private care. This problem, however, is not so great as it is supposed to be for several reasons. Clinic treatment can not compete with private treatment in that the patient must suit his convenience to the clinic for, unlike the private physician, the clinic is not at his beck and call. Another thing that eliminates those able to pay is that they fear that others may see them entering or leaving the clinic and thus the fact that they are infected will be exposed to the public. Private care is more satisfactory to the patient also for the reason that the private physician has more time to discuss the case with the patient, which is very desirable.

Complete treatment and laboratory records must be kept and these records *must be confidential*. If the clinic is made a part of the Board of Health, all records then become Board of Health records and are open only on court order. Easy access to these records is the surest way to drive patients away. There is really no good reason for exposing the records if the clinic is a part of the department of health, because it is up to this department to take all steps necessary to insure that the public be not menaced. Insurance companies, divorce attorneys, industrial plants and governmental agencies should receive information only on the order of the court.

At the present time, in Vanderburgh County, whenever those in charge of certifying people for work on the WPA find or suspect that the applicant has a venereal disease, they insist that the applicant bring a statement from the clinic that the patient is not in an infective stage. This has never been furnished in Vanderburgh County for the simple reason that the clinic is a part of the health department and as such is charged with taking such steps as are necessary to protect the public health and it is not deemed necessary to debar a venereal patient from any work other than food handling. We have a law that prohibits the venereal patient from handling food and so long as it is on the statute books it should be enforced, though there is considerable crystallization of opinion in favor of its revocation at the present time. However, there is no reason from a public health standpoint to assume that a patient will be a menace to his fellow workers working on a road or a sewing project, even though he or she may be in an infective state from a sexual contact. This is also true as to the schools. According to Nelson of Massachusetts, "A great deal has been said, but little evidence has been presented, against the public school

* Presented before the Gibson County Medical Society, January 8, 1940.

toilet seat as a factor in the spread of gonorrhea among girls. There is this evidence of its innocence, that although the whole school may use the seats during a brief recess, no *epidemic* of gonorrheal vulvo-vaginitis in a public school has ever been recorded. Cases of disease have most certainly been found in many school girls, but although the toilet seats have been promptly blamed, as the easy way out, the probability of infection at home or through sexual contact has not been carefully ruled out. Actually, when thorough investigations are made, it is by all odds the rule to find more likely sources of infection outside the school. It is less embarrassing to accuse a toilet seat than to seek for sexual sources or to request the examination of other members of the family. And it requires much less tact and no labor."

In the matter of furnishing certificates such as are required by industrial plants, etc., that may require the applicant to produce a blood report, this should be left in the hands of the private physician. If the party is indigent, the clinic may draw samples and send in such samples of blood or pus but a lot of trouble will be avoided if this information is passed on to some physician in private practice to make out the certificate, for by this method he keeps his opportunity to charge those able to pay for this service.

Treatment of patients should be given regularly and the scheme of treatment supervised by one person. Clinicians may be changed at intervals if it is so desired, but there should be some one directly in charge of the treatment who is in continuous charge of it. Many cases will not do well under routine schemes of treatment and it is these that require some one to direct their treatment who is familiar with the idiosyncrasies of the individual. Whenever a patient recoups his finances to the point that he can afford to pay for private treatment, he should be transferred to a private physician and a complete record of his laboratory findings and treatment should be mailed to the physician, not given to the patient. In case of the removal of a patient from the health jurisdiction, a transfer should accompany him to his destination in the manner approved by the State Board of Health.

The director in charge of the clinic should be a Deputy Health Commissioner which will give him the power to enforce the health laws and regulations peculiar to venereal diseases. Unfortunately, we are all familiar with the patients who, after a small amount of treatment, decide that they cannot be bothered further and discontinue treatment. These can be brought back into the fold through the enforcement powers of quarantine on the part of the health officer. Where there are no other quarters available for use as a quarantine station, certain cells in the county jail can be officially designated as quarantine stations, and the meditation induced by the solitude engendered by their confines has on occasion been instrumental in causing a patient who has been very irregular in attendance for treatment to lose all desire to play hookey.

All patients with a recent infection should be required to give probable sources of infection and contacts to whom they may have passed the infection. The aforementioned quarantine cells often refresh a memory that has been very poor. Sources and contacts should be brought in for examination and treatment should be required. The immaculate infections that are so frequently told about, especially by the ladies, may be regarded with "due admiration for the artistry" of their fanciful figmentation but need not deter one from seeking the truth. While, as Pelouze says, "It does no harm to a bathtub, toilet seat or douche nozzle to be accused of having infected a woman and it assuredly is a great comfort to the woman," yet the acceptance of such a story is poor scientific reasoning, and the physician is "almost always correct if he disbelieves such stories."

The clinic must also take an active part in the dissemination of educational material and aid in the effort to educate the public concerning the seriousness of the venereal diseases. Educational material for the newspapers is very desirable, though news stories concerning the clinic are for the most part to be avoided. Educational films for lay groups and discussions for lay organizations are to be encouraged. Pamphlets also should be distributed to patients and others interested.

In conclusion, it is not advocated that a clinic be entirely independent to the extent that it does not fuse with the general state and national set-up for the control of venereal diseases. Close cooperation must be obtained. However, in the solution of local problems, the authority should remain in the hands of the local officials. Mistakes will possibly be made but there is a greater chance of error on the part of one that is far removed from the scene. Another reason why funds should be obtained from local taxation is that changes in financial policies of the state and national governments will not then affect the set-up. There is no telling when an economy wave will wipe out such funds. This happened after the World War and may happen again.

EIGHTH ANNUAL
POSTGRADUATE COURSE OF THE
INDIANA UNIVERSITY SCHOOL
OF MEDICINE
May 6 to 11, 1940

See program on page V

DOCTOR BOOKS

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At the outset, it was my intention to peruse more or less carefully and critically all the more recent books which were written either by doctors themselves or by others about doctors. It was then found that so large a number and assortment of such books were extant as to preclude the possibility of reading them even casually and as to defy an attempt at classification.

A somewhat elastic classification might be made as follows:

I. Semi-historical
II. Biographical
III. Novel
IV. Personal Experience
V. Educational Essay
VI. Philosophical

The question as to why all this interest in things medical comes to mind. In looking about for an answer, no very definite conclusion could be drawn but some ideas on the subject were evolved. Hippocrates might have the answer in part in one of his proverbs, "Where there is love of man, there is also love of The Art." (The Art of Medicine). It must be borne in mind that in those days before the Christian Era medicine was more an art and less a science than it is today. Another way of saying this would be that because man loves man and is interested in his welfare, he naturally is interested in the art by which these interests are protected. Up to the time of and including the Victorian Era, what Sir Andrew Clark, a prominent London consulting physician, called "the laws of physiological righteousness" were then regarded as something quite unsuitable for ears polite, and conversation on physical disorders was so nearly taboo as to be in no way comparable with that on political, theological, or meteorological disturbances. Now the somewhat cynical Scottish proverb that "Every man at forty is fool or physician" is almost true. It is also true that the ideal of medicine has changed since that time from one of cures to one of prevention of disease. Sir George Newman said, "There is no public duty of more consequence than the education of the people in the health of body and mind and that the survival of the community is primarily dependent upon physical conditions, the life, health and capacity of the human body." It may be that this feeling either consciously or subconsciously has been responsible for the new interest in things medical. There must be, however, other factors responsible for this interest. In the first place, things medical are interesting in themselves and of such nature as to provoke thought and regard for them There is also an element of mystery which arouses a certain trait of natural curiosity in the mind of man. Some of this curiosity is intellectual and well directed, while some is more of the morbid variety. It must be stated, also, that some of the novels and dramas are written to appeal largely to the latter interest. There is much of the element of suspense and thrill embodied in the activity of medical men as, for example, the removal of a gangrenous appendix, and the prompt remission of pneumonia under modern treatment. In retrospect, to emphasize some of the foregoing statements, it is well nigh impossible for us today to appreciate the terror under which people of the Middle Ages lived with respect to plagues and epidemics of infectious diseases which often more than quartered the population. Today a student of medicine may graduate and practice his profession a long time without even so much as seeing a case of smallpox or typhoid fever. Finally it must be stated that these remarks are by no means exhaustive of the reason for the interest in literature pertaining to the doctor.

HISTORICAL BOOKS

In olden times, medicine was so intimately associated with magic and religion as to be overshadowed by them, and the story of the emergence of medicine from such bondage is a very absorbing one. This leads us, therefore, to the first class of books, namely, the semi-historical books. Some of these, such as Sigerist's *The Great Doctors*, Garrison's *History of Medicine*, Major's *Classic Descriptions of Disease*, Fulton's *Selected Readings in the History of Physiology*, Osler's *The Evolution of Modern Medicine*, and others of this character are written more or less in textbook style, and are sufficiently technical as to be of interest only to students or practitioners of medicine. A classic description of a disease, for example, would lose much of its beauty to one not aware of the fundamental features of the disease. There is a group of books, however, written with sufficient freedom from technicalities and with due regard for truth as to be very readable, interesting, and at times entertaining.

Sixty Centuries of Health and Physick, by S. G. B. Stubbs and E. W. Bligh, is essentially a history of medicine but is quite readable.

Medical Leaders by Lambert and Goodwin is essentially a history of medicine as exemplified by recounting the lives of medical leaders.

The Lame, the Halt, the Blind and *Devils, Drugs and Doctors* by Haggard, deal with medicine as mixed with former superstitions, faiths and magic and for the most part are entertainingly written.

In another, *Behind the Doctor*, Logan Clenden-

ing has sought to show what is back of the knowledge possessed by the modern medical man.

The *Pathfinders in Medicine* by Victor Robinson is similar in approach to the *Leaders in Medicine* by Lambert but is written in a markedly verbose and gross style so that part of its effectiveness is lost.

Hans Zinsser has written his book *Rats, Lice and History* in a somewhat smart-aleck style, but in general with good effect. It is certainly authoritative, for no better student of typhus fever than Hans Zinsser lives today. And as food for thought for our egocentric philosophers, the following quotation from this book is quite appropriate:

"The louse shares with us the misfortune of being prey to the typhus fever virus. If lice can dread, the nightmare of their lives is the fear of someday inhabiting an infected rat or human being. For the host may survive; but the ill starred louse that sticks his haustelleum through an infected skin and imbibes the loathsome virus with his nourishment, is doomed beyond succor. In eight days he sickens, in ten days he is in extremis, on the eleventh or twelfth his tiny body turns red with blood extravastated from his bowels and he gives up his little ghost. Man is too prone to look upon all nature through egocentric eyes. To the louse we are the dreaded emissaries of death. He leads a relatively harmless life—the result of centuries of adaptations: then, out of the blue, an epidemic occurs, his host sickens, and the only world he has ever known becomes pestilential and deadly; and if, as a result of circumstances not under his control, his stricken body is transferred to another host whom he in turn infects, he does so without guile, for the uncontrollable need for nourishment with death already in his own entrails. If only for his fellowship with us in suffering, he should command a degree of sympathetic consideration."

Doctors on Horseback by Flexner is a very good book, perhaps more biographical than historical in a strict sense, yet the general theme is historical of American medicine. There are few more interesting stories than that of William Beaumont in his studies of the stomach physiology through a fistula created by a gun shot wound in the body of Alexis St. Martin. The history of Army medicine in the Revolutionary days emphasizes more than ever the almost insurmountable difficulties of our forefathers. One could scarcely read a more thrilling story than that of Ephraim McDowell in extirpating an ovarian cyst in 1810 on Christmas Day—the first abdominal operation. It seems ironic that McDowell, after having paved the way for operation on the gall bladder and appendix, should die of an inflammation of the latter. The stories of Morgan, Rush, Morton and Long are equally fascinating. This book cannot but give the reader a profound respect and knowledge of the great difficulties encountered in the early days in the progress of medicine and make one swell with pride at the part played by American medicine.

Microbe Hunters and *Men against Disease* by Paul DeKruif are similar examples. These books are readable and with but few exceptions true to fact.

The Story of Surgery by Harvey Graham is another excellent book and the subject matter is handled in a scholarly manner. It is sufficiently lacking in technical language to make it very easy reading for the layman. The story of surgery from our earliest records is faithfully told. Those who believe that present day physicians have a corner on all the vices of medicine will be shocked at the behavior of one John of Gaddesden, who published a book, *The Rosa*, for whom the author proposed the subtitle "How to Make Money in Medicine." One section of his book was labeled "Disagreeable Diseases which the doctor can seldom make money by." It was also stated that John always prescribed twice as much of any drug for his rich patients, as for the poor ones, and for that time, 1820, of very dubious advantage to the former. John Mirfield was not only a severe critic of surgeons but even more so of physicians when he wrote "Modern physicians possess three special qualifications and these are to be able to lie in a subtle manner, to show an outward honesty, and to kill with audacity," and still more crushing " . . . the physician if he should happen to be a good Christian which rarely chances."

Even at this early time one paragraph contains a most modern concept of the interdependence of medicine and surgery: "Long ago, physicians used to practice surgery, but nowadays there is a great distinction between surgery and medicine and this I fear arises from pride, because physicians disdain to work with their hands, though indeed, I myself have the suspicion that it is because they do not know how to perform particular operations and this unfortunate usage has led the public to believe that a man cannot know both subjects, but the well informed are aware that he cannot be a good physician who neglects every part of surgery and on the other hand a surgeon is good for nothing who is without knowledge of medicine."

BIOGRAPHICAL BOOKS

Closely allied to this group of books is another—the biographical. These two are at times difficult to separate for are not history and biography closely linked? In this biographical group for lay readers might be mentioned—

The Life of Sir William Osler by the late Harvey Cushing. The book is written in the clear style so characteristic of Dr. Cushing, and details of Osler's life are given with meticulous care. If Osler was a great man he becomes even greater through the biography written by his very close friend. If one were to recommend to a young medical student a book to read for the purpose of giving him an intellectual life, a lasting inspiration and a passion for all the idealism of medicine, he could do no better than to send him to these

volumes. One quotation widely publicized, "Osler recommends chloroform at sixty," spoken in his farewell address at Hopkins in a light vein, brought upon Osler storms of abuse, and gave the public an idea that the cold blooded scientist would execute those in the declining meridian of life. To this Osler never would make an answer or explanation. "Oslerize" became a byword all over the country. As it was Cushing's custom in his scientific notes so it was in this biography, no detail of significance was passed over.

Another book of a purely biographical character is the one on *Noguchi* by Gustav Eckstein. This is written in what seems to be an Oriental staccato style. It is said that the author habitually writes in this manner, though the subject matter is not Oriental in origin. The book is an interesting story of a most unusual and interesting character. Noguchi was a man of genius given to many bizarre whims delightfully portrayed by Eckstein. Noguchi was a veritable dynamo for work. The reading of this book creates a profound respect in the mind of the reader for the genius driven by the fire of research. Perhaps the greatest disappointment that could come to any man came to him in his error on the etiology of yellow fever. His great successes and popular idolatry probably in a small way took the sting out of this, what he strongly suspected at the time of his death, a failure and error. Ironically enough his death was probably due to yellow fever. He died without knowing the certainty of his error.

The Little Doc or The Story of Allen Roy Dafoe, physician to the quintuplets, by Frazier Hunt, must be mentioned in this category, though the book is by no means in a class with the other two. Hunt has made the most of the subject matter. The book on the whole is interesting, chiefly because the story of the birth and care of the quintuplets represents one of the greatest miracles of nature, not only because of the extreme rarity of quintuplets, but also because of the delivery, nursing and successful rearing of the five under overwhelming odds is a still more unique occurrence. But why would Mr. Hunt choose such a title as *The Little Doc* and why would an editor pass such a title? Certainly if his life of self sacrifice in the French Canadian town of Callander did not entitle him to a more respectful title, his part in the great drama of the quintuplets should have done so. Yet in his syndicated articles, with picture attached, he probably justifies Mr. Hunt's choice.

Another group under the third classification is a group of novels, whose central character or theme has to do with doctors and the medical profession. One of these, a well written and rather absorbing novel, is *Dr. Bradley Remembers*, by Francis Brett Young. Dr. Mortimore, Dr. Bradley's preceptor, a rather rough and ready doctor with mementos (among which was a human skeleton), of experiences on Spanish Men-of-War, represents one who has achieved much fame for his cures among the people of his community. As Bradley goes to school, the author rather picked the flaw in this sort of hero worship. The book is evidently built upon the hypothesis that readers rather revel in the many calamitous things that can happen to an individual, as in this case to Dr. Bradley. There was first the mother-son complex, then the reaction; the after schooling and apprenticeship, and marriage; then the mother-son worship again, to the detriment of both father and son, then the wife and mother's death. The ruinous protection of the son by the mother lays the groundwork for the boy's destruction as a narcotic addict. Throughout these tribulations, however, old Dr. Bradley's serenity still persists to the night of his retirement when he "remembers."

The Citadel by A. J. Cronin was said by some of the previews to be an exposé of panel practice as set up in England. If this be true, the point is so well kept under cover that an average reader might not see it. In *Dr. Bradley Remembers* a similar discourse as to professional feeling on this point is recalled. Dr. Bradley was being ostracized and boycotted but, when the showdown came, his competitors showed the yellow feather and left him in a stronger position than ever. In *The Citadel* so much abuse is portrayed under the cloak of professional license as to make one wonder what sort of an experience the author Cronin, a doctor, could have had. Even after the fall of the strong character, Dr. Manson, he is made to be seen out in the clean open spaces again only to go into a rather dubious group of tuberculosis specialists. No doubt such abhorrent skullduggery as giving sterile hypodermics to neurotic women high in society occasionally occurs, yet it is almost certain that such is by no means a common practice in our country and it is highly probable that it does not frequently occur in Great Britian. What experience could have moved the author to write with such vemon regarding the examination for the National Medical Organization, M.R.C.P., comparable in this country to the F.A.C.P. or F.A.C.S.? Manson had done extremely creditable research in the question of tuberculosis and silicosis, and perhaps the difficulties encountered in making the M.R.C.P. were a little more than should have been expected. The one character, Chris, made tolerable an otherwise intolerable book.

The Doctor by Mary Roberts Rhinehart is again the story of the usual colossal struggle of getting graduated from medical school, then the almost impossible feat of becoming established in medicine. Then follow some rather ridiculous love affairs and impossible marriages, the deaths and divorce and more peculiar love affairs and marriages, this time for keeps. The usual typhoid epidemic asserts itself and draws the mettle of the young doctor. How one so weak as regards his personal life should be so strong in the affairs of the world is perhaps strange but not so far from the truth. The young doctor, however, must not stop at such a mediocre place as having put the city fathers in their places; he must aspire to dizzy heights—

he must become a surgeon. An accident, in which an important nerve in his right arm was severed, emphasizes the emotional state into which an individual can be thrown by an incident. All this shows rather expert handling. Of course, the doctor became the surgeon of his dreams and lived happily thereafter.

BOOKS OF PERSONAL EXPERIENCES

There is a group of books to which might be applied the term "Reminiscences," or "My Experiences in the Practice of Medicine." The usual hard struggle of a poor boy through medical school is portrayed in the usual stereotyped manner by Fredrich Loomis in *The Consultation Room.* Then follows the narrative of securing a toe-hold in the practice of medicine. A number of incidents are recounted in succeeding chapters. A discussion of ethics as involving practitioner and consultant is intelligently set forth. This should at least go part way in furthering the understanding of the poor patient as regards professional ethics. After all a code of ethics evolved through centuries of practice is apt to have behind it much good sense and reason. There follows a chapter on "Circumventing the law," and another on "Brides, Grooms, and Expectant Fathers." A birth on the high seas brings out the various national laws as to citizenship, and in another a court scene portrays an expert witness really proving something. One chapter is devoted to his technique in the handling of problems peculiar to middle-aged women. On the whole the book was interestingly written and probably not too ambitious in its educational appeal.

In *Doctor, Here's your Hat,* by Joseph A. Jerger, there is an exposé of the author's idea of things. Here again is set forth the great struggle of becoming a doctor and the vicissitudes of general practice in Waterloo, Iowa. It must be stated that in many instances it is remarkable what one with imagination, adeptness, and common sense can accomplish without all the modern hospitals and paraphernalia for the treatment of disease. It must be pointed out, however, that enumeration of such successful cases is entirely valueless and misleading so far as any statistical value is concerned. It is easy, so easy to remember only the successful ventures and to forget the failures. Then came the doctor's move to the big city of Chicago, and the author's private opinion about hospital staffs and socialized medicine. It is true that the hospital staff is interested in the qualifications of those seeking to practice within the walls of the hospital. This is as it should be, for a moral obligation rests with the staff that a reasonable degree of proficiency has been attained by the practitioners. That this power has been abused, there is probably little doubt, but on the whole the spirit is right and the public is well served thereby. A helping and welcoming hand is the rule, and the spirit of the hospital staff is very friendly to those of serious minds, honesty of purpose, and skill in the medical arts. Before starting in the big city, however, this doctor makes a world cruise and arrives in China and Australia just in time to help in two extremely hazardous and difficult operations. It is quite obvious throughout the book that the author is aware of and is well satisfied with his own proficiency.

Hertzler in his book *Horse and Buggy Doctor* writes as he talks in a wise-cracking style. He is as extreme in some of his views, set forth in his book, as he is in some of his professional work. He sets forth in a vivid manner some of the problems of a doctor. His anecdotes at times tax one's credulity, but they are probably true. He has through all the trials and cares of his life and practice built up a sizable clinic, written innumerable books and scientific articles, and has become nationally well known. Despite his vagaries, he must be somewhat of a genius. He takes great delight in the ridicule of those who are sure of themselves. One of his favorite remarks is the allusion to the "Learned, East of the Alleghenies." This remark is found several times in his book. His philosophy is homely, usually very common sense, at times extreme and at least on certain matters what he himself has styled the "Tom Cat variety." The book is readable and entertaining and not too much loaded down with educational material. In fact the general tone of the book is to relieve the tension of the seriousness of things in general. He must have had a lot of fun writing it.

The Healing Knife by George Sava outdoes the superlative in hardships in getting a medical education. Much of it is extremely interesting. Born to Russian royalty, the hero miraculously escapes the Revolution, and then wanders through the Balkans, Turkey, France, Italy, Germany and to England. His emotions, so characteristic of his people, get him into numerous love entanglements and still further hardships. A high point in his career is a clinic by Professor Tanzi on the malarial treatment of paresis. But this was not for him, he must really become a great man, he must become a surgeon. By hook or crook he finally managed to become Surgical House Officer in a famous hospital in Germany. Luck was with him and daring risks in surgery brought him advancement and saved him from disgrace. He also airs his views as to the need for some sort of government aid for young mothers.

Body Menders by James Harpole is evidently a serious attempt to educate the public on matters pertaining to new methods in medicine. As is true of most of these books, they convey the idea that accomplishment is much easier and better established than it is. But on the other hand a book on "What Medicine Cannot Do," and some of the colossal failures, probably would not be written. Speculation upon such an idea is, therefore, useless. On the whole the incidents recounted in the book are rather interesting but the general feeling of smugness imparted by treatments administered rather spoil the general effect.

Victor Heiser's book, *A Doctor's Oyssey*, is not only an interesting book but a useful one, in that problems of all parts of the world are portrayed. The variations of climate, race, customs, economics, politics, diseases and hygienic problems are interesting reading. We are brought face to face with great epidemics and diseases in our own time and in an insidious way are made to realize the great debt due our predecessors, not only for the knowledge of mode of transmission of disease, but for engineering successes in its successful combat. Leprosy, dysentery, cholera, hookworm, malaria and many others serve to emphasize these. The serious motive throughout the book as regards problems of public health is amply relieved by anecdotes of the author's life. Anglers will appreciate the fine fish story as told by the author concerning himself and General Wood. A note of smugness is in evidence more particularly in the incident where eleven words were given a New England teacher of English to spell. Her discomfiture in the failure to spell all but four of them served as atonement for the author's icy reception at her hands. Just as the *Odyssey* is a useful and good book, Heiser's other book, *You've the Doctor*, is disappointing. A subtitle is "Dr. Heiser's Program for Personal Health." It would seem that his program is that which suited Victor Heiser and by the same token would be what would suit you or me. It is presumptive for one to suppose that any considerable portion of the population would be interested in what he ate, whether hot or cold, and when; what he drank, whether soft or hard, and when and why; what he wore, whether long or short underwear, and why and when; what he smoked, what amusements he enjoyed, what games he liked, what climate suited him and the why and how of all, ad infinitum.

The prize story of the book was relative to the oft repeated story of the hurricane of New England States in 1938. The pall of the oft repeated story was emphasized by a sandwich man who bore on his back the legend "For twenty-five cents I'll listen to your story of the storm." His advice about the common cold is perhaps as good as anyone's for as yet no one knows just what to do about it. The book abounds in the philosophy so noticeable in the author's conversations, and should perhaps not be taken too seriously.

PHILOSOPHY

There stands alone a book in its own class, a philosophical one, *Man the Unknown*, by Alexis Carrell. While one would hardly recommend the book for casual or light reading, it is perhaps the most thought stimulating book of this whole group. Whether one agrees with the viewpoint of the author matters little. At the outset a consideration of the physical properties and attributes of man including so many billion cells rather has the New Deal effect in obtunding the intellect, but once that is over one's inferiority complex is not too much augmented. He says, "Man must now turn attention to himself and to the cause of his moral and intellectual disability." He asks rightly —"What is the good of increasing the comfort, the luxury, the beauty, the size and the complications of our civilization if our weakness prevents us from guiding it to our best advantage?"

As to medicine he calls attention to the fact that the youth has been saved but that we have not succeeded in increasing the duration of our existence and emphasizes further the fact that a man of 45 has no more chance of dying at the age of 80 years now than in the last century. He comments further, "The failure of hygiene and medicine is a strange fact." In spite of progress achieved in the heating, ventilation and lighting of houses, of dietary hygiene, bathrooms and sports, of periodical examinations, and increasing numbers of medical specialists, not even one day has been added to the span of human life. Then further, "Longevity is only desirable if it increases the duration of youth and not that of old age." On second thought, therefore, he opines "It would be better to find ways and means of conserving organic and mental activities until the eve of death," otherwise a long span of life would be a calamitous burden on the youth. In the field of medicine he emphasizes the importance of the individual and states that "Disease is a personal event. It consists of the individual himself. There are as many different diseases as patients." However, enough of these followed a pattern as to allow classification and medical treatises to be written. He aptly states, "The physician must clearly distinguish the sick human being described in his books from the concrete patient whom he has to treat, who must not only be studied, but above all relieved, encouraged and cured." He then attempts to point out some of the reasons for the distrust of the public toward medicine. "The distrust which the public feels toward medicine, the inefficiency and sometimes the ridicule of therapeutics are perhaps due to the confusion of the symbols indispensable to the building up of medical sciences, with the concrete patient, who has to be treated and relieved." In other words, the physician has become a victim of universals.

Finally, as regards medicine, he visualizes the science extended in such manner as to embrace the other sciences of man, and to supply society with engineers understanding the mechanisms of the body and the soul of the individual, and of his relationship with the cosmic and social world. He then questions whether an individual could master anatomy, physiology, biology, chemistry, psychology, metaphysics, pathology, medicine, and also have a thorough acquaintance with genetics, nutrition, development, pedagogy, esthetics, morals, religion, sociology and economics, and answered that he thought it not impossible, and that with twenty-five years of continuous study and at the age of fifty, those who have submitted themselves to this discipline could effectively direct the construc-

tion of the human being and of a civilization based on his "true nature." The qualifications laid down for a physician would certainly relieve the present day over-crowding of medical schools. Indeed, the few gifted individuals who dedicate themselves to this work will have to renounce the common mode of existence. They will not be able to play golf or bridge, to go to cinemas, to listen to radios, to make speeches at banquets, to serve on committees, to attend meetings of scientific societies, political conventions and academies, or to cross the ocean and take part in international congresses. They must live like the monks of the great contemplative orders and not like university professors, and still less like business men, and so on. The author speaks much and at length on clairvoyancy, and truly the concept of the super-doctor of above must be the product of a clairvoyant mind.

In summary it might be stated that since the development of medicine throughout the ages as an integral part of our civilized ideas, any treatise upon such a subject, properly written, is not only useful, but of high educational value. Just as medical truths were evolved by extreme self sacrifice and martyrdom, just so the story is likewise equally interesting. Biographical sketches of the great characters in this drama are of like interest and value. When we come to the novel as written today the motives and interests are entirely different. So many of the present day English novelists are doctors that it would seem one purpose of the medical school is to educate novelists. A formula would then be to graduate from medicine and if a period of time, not too long, could be spent in the actual practice of medicine, so much the better. During this time, the sprouting novelist could pick up some particularly reprehensible piece of folly, and groom a character, some intellectual bantamweight, not too careful of moral ethics, to embody it and there you have the essential ground work for a novel. It must not be forgotten that a juicy by-product is a first rate movie scenario. A good novel does more than entertain, and in all fairness most of them make an attempt at painting a moral. Numerous problems are brought forward today as regards medical care and at least some attempt is made in the books to clear a path through the wilderness. These problems cannot be entirely new for it is recorded that as early as the seventeenth century, the foremost obstetricians, Peter the Elder and Peter the Younger, Chamberlains of England, were so often not available at a very necessary time, because they were on one of their periodic crusades in favor of the union of Scotland and England, national health insurance or compulsory education, for all of which things the Chamberlains were agitating centuries before anyone else thought of them. The allusion to health insurance has a singularly modern tone. It is also interesting that of the books read, surgeons were the ones proposing some new form of insurance or governmental scheme. In contrast to this the example set by Percival Pott who preferred to attend to his business, by hard work and on sound principles, seems a much more effective weapon for the placing of medicine and surgery on a plane they justly deserve.

There seem to be in general about three reasons why doctors would write of their personal experiences:

First, for the pleasure they have in the writing.

Second, to educate the public. To this it must be stated that it is extremely doubtful if much is accomplished. It is almost certain that there is no excuse for any writing where symptoms of a disease are mentioned, for to have a perspective on the value of symptoms, years of study and preparation must be made. Such writing can only contribute to the unhappiness and worry of the poor reader who thinks he or she has everything mentioned. There is evidence that this urge is misunderstood by its possessor, in a manner similar to the farm boy in Kansas who saw the letters G. P. C. in the sky. To him they had a stern and ethereal meaning: "Go Preach Christ." His father's explanation of the symbol, "Go Plow Corn," was on purely mathematical grounds, much nearer the truth and much saner.

A third motive some authors have in writing of their experiences is to conduct a crusade for some sort of socialized medicine or insurance scheme. Sir Percival Pott by his example some three centuries ago seemed to have hit upon an extremely sound campaign with regard to this problem. To these authors one is also tempted to say "Go Plow Corn."

Finally, it must be questioned whether the effect upon people as a whole, of all the books, pamphlets, magazines, newspapers, radio, cinema, lectures, etc., concerning almost any conceivable subject from the dread halitosis and B. O. to such sublime subjects as cancer and maternal mortality, is to create a sort of anxiety neurosis. Such a book as *A Hundred Million Guinea Pigs* could well serve as a simple illustration. While speaking of this effect as a sort of health neurosis, one may be placing the matter a little strongly, but it is my conviction that there is a definite tendency to this. As regards a too dogmatic statement on this point, your attention is directed to the first aphorism enunciated by the father of medicine: "Life is short, and the Art long, the occasion fleeting, experiences fallacious, and judgment difficult."

INDIANA UNIVERSITY SCHOOL OF MEDICINE EIGHTH ANNUAL POSTGRADUATE COURSE
May 6 to 11, 1940
Plan to Attend—See Program on Page V

Medicine Today

"Be not the first by whom the new are tried, nor yet the last to lay the old aside."

LOUIS SEGAR, M.D.
INDIANAPOLIS

The first Mead Johnson award for the outstanding work of the year conferred by the American Acadamy of Pediatrics went to Dr. Frederic A. Gibbs for his investigation of epilepsy by use of the electroencephalograph. Dr. Gibbs has revolutionized the study of epilepsy, and has brought us a step nearer to an understanding of the fundamental nature of epileptic seizures. The electroencephalograph demonstrates the so-called cerebral beat, and the varied disturbances of that beat which reflect themselves in the manifestations of epilepsy. Through the study of such cortical dysrhythmias, disorders which occupy the epileptic fringe are seen to include many problem children, individuals with personality disorders, and approximately one-half of the near relatives of epileptics. The detection of epilepsy in its subclinical forms will, in many cases, modify medical and psychiatric diagnosis, and the term epilepsy will include many who believe themselves well. Let us join Dr. Gibbs in his hope that further research will show the way to stabilize the beat of the brain in order that at least the severest paroxysmal cerebral dysrhythmias may be prevented.

* * *

The second Mead Johnson award went to Dr. Dorothy H. Andersen for her study of Cystic Fibrosis of the Pancreas, Vitamin A Deficiency, and Bronchiectasis. Pancreatic deficiency in infancy and childhood is rather common, according to Dr. Andersen, and its recognition rather than the disease is unusual. Her interest in the condition was stimulated by the post mortem findings in a child of three years who had presented a clinical picture of celiac disease, i. e., delayed development, muscular weakness, flat buttocks, prominent abdomen, fretful disposition, hunger, and a mild persistent diarrhea characterized by large foul stools with a high content of fat. This child did well on a diet of protein milk and banana, but died as the result of a pneumonia which occurred following the surgical repair of a congenital torticollis. At autopsy the pancreas was found to be composed of small and large cysts embedded in a mass of fibrous tissue. Most of the lumina contained round masses of eosinophilic material resembling corpora amylacea. The islands of Langerhans were normal in number and appearance. The liver was large and fatty. The lungs showed scattered small abscesses and broncho-pneumonia. Then Dr. Andersen reviewed the last 1,000 autopsies in the Babies Hospital, New York, and found 20 cases in which the pancreas showed similar cystic fibrosis. Most of these patients had died of chronic pneumonia before the age of six months and several were thought to have congenital bronchiectasis. Another group who survived for from six months to fourteen and a half years presented the celiac syndrome. In the first group the parents usually stated that they had lost one or more babies because they "didn't do well, failed to gain although food was taken well, and they got broncho-pneumonia." The occurrence of large foul stools may have been first noticed at birth, or at varying ages up to six months, and often became obvious only after the addition of cereals to the diet. The baby had frequent colds, or one cold which he did not throw off, and an intractable cough. The respiratory infection increased slowly or swiftly to a fatal termination. In occasional instances there was evidence of xerophthalmia. In other words, the disease, cystic fibrosis of the pancreas, should be strongly suspected in any infant or child who has had steatorrhea in the first months of life, and has shown delayed development in the presence of a good appetite, and adequate diet. A story of repeated respiratory infections, or of corneal ulcers, or the discovery of bronchiectasis in a young infant should lead to an investigation of pancreatic function. The best available proof of the diagnosis is the absence of pancreatic trypsin and lipase in the duodenal juice. The clinical picture is the composite result of the failure to absorb various foods, although there is good evidence that these patients can utilize protein and banana fairly well, and cereal starches almost not at all.

It has been found that vitamin A is always closely associated with fat, not only in foods, but in the intestinal tract, the blood serum, and in the various organs. If fat is left unabsorbed in the intestines the vitamin remains with it. Dr. Anersen believes that the tendency to broncho-pneumonia and bronchiectasis in cases of pancreatic fibroses is the result of changes in the bronchial epithelium due to vitamin A deficiency. Dr. Andersen also suggests that from the therapeutic standpoint there is something to be gained by the administration of large doses of powdered pancreatin. She succeeded in getting babies with this disease to gain weight when one gram of powdered pancreatin was added to each bottle of a whole evaporated milk formula. She also suggests that vitamin A should be administered consistently and generously.

* * *

Certainly **the most dramatic event in pediatric advance** has been the surgical attack upon patent

ductus arteriosus. The report of eleven cases in which the ligation of ductus has been successfully carried out by Dr. Lewis T. Bullock of Los Angeles is ample evidence of the feasibility of not only the surgical procedure itself, designed by Gross, but also of the accuracy in diagnosis which makes possible the selection of uncomplicated patent ductus cases. A continuous murmur in the pulmonic area, varying in intensity during each cardiac cycle and usually maximum in late systole or early diastole, emphasized by Gibson as being pathognomonic of this lesion, is the most important sign.

PUBLIC RELATIONS

In response to requests for a short article to be published in the bulletins of local luncheon or civic clubs, on the question of socialized medicine, the Ohio State Medical Association has prepared an article which is worthy of reprinting. It is as follows:

POLITICAL CONTROL OF MEDICINE

Like other groups devoted to protecting the interests of the people, the _____ should oppose that which produces detrimental results. Therefore, members should make a critical examination of legislative proposals for compulsory health insurance or other forms of state medicine.

The Council of the Ohio State Medical Association has raised the following valid objections to government-controlled medical care programs:

The quality of medical care would be damaged, and the public would suffer because of political domination of the practice of medicine.

The nation's tax bill would be enormously increased because these programs necessarily would be tax-supported. A complete system would cost as much as $3,000,000,000 annually—no small sum for a nation now $45,000,000,000 in the red.

A mechanized system of medical care would replace the present personalized relationships between the physician and patient. A gigantic bureaucratic machine would be necessary to administer the system. Patients would become case numbers, and doctors political hirelings. The recognized principle that a person has a right to select his own physician would be destroyed.

State medicine would become the entering wedge for a vast program of socialization of America's commerce and industry. The legal profession would undoubtedly be next. Then the banks, utilities, and commodity producers would follow.

The medical needs of the American people can be met without resorting to coercive legislation. The provision of complete health services for the indigent from public funds is universally accepted by both physicians and public officials. Low-income families may take advantage of several methods of financing adequate medical care—private arrangements with their physicians, budgeting plans, post-payment plans, or voluntary health insurance.

The private practice of medicine is the system most compatible with American democracy. Under it America holds world leadership in health.

ABSTRACTS

SULFANILAMIDE AND STREPTOCOCCI

The failure of sulfanilamide to check infection due to two of the several types of streptococcus, some of which have proved susceptible to the drug, is reported in *The Journal of the American Medical Association* for March 9 by Alexander H. Rosenthal, M.D., and Florence M. Stone, Ph.D., Brooklyn, N. Y.

They cite two fatal cases in which sulfanilamide was given for endocarditis (inflammation of the inner membrane lining of the heart) complicating pregnancy. The infection in one case was due to group B and in the other to group C hemolytic streptococcus (a microbe capable of dissolving red blood cells). The authors believe that theirs is the first reported case of a fatal infection due to the group C streptococcus to occur in a human being.

From laboratory experiments which they carried out on the effect of sulfanilamide on both strains of the streptococcus, Drs. Rosenthal and Stone conclude that the drug has little, if any, effect on these streptococci.

METHOD DETERMINES SAFE ALTITUDE FOR PNEUMOTHORAX PATIENTS

A method for calculating just how high an altitude is safe for plane travel by patients with tuberculosis of the lungs after pneumothorax (lung collapse) treatment, is presented by C. H. Gellenthien, M.D., Valmora, N. M., in *The Journal of the American Medical Association* for March 2.

Pneumothorax treatment involves the introduction of air or nitrogen gas into the space surrounding the lung. This procedure collapses the lung and thus gives it partial or complete rest from the processes of breathing. Changes in altitude and the consequent changes in air pressure may upset the patient's equilibrium.

The application of his method, the author points out, may be valuable in determining the size of injection of air into the lung when changes of altitude are contemplated.

The method takes into consideration such factors as the altitude at which the patient has been living and at which the last supply of air was added to the lung, the interval of time between injections of air, the length of time since the last injection, and the capacity of the lung when it is completely collapsed. While the safe altitude varies for each individual, Dr. Gellenthien points out that a typical patient can safely fly 2,000 feet above sea level four days after pneumothorax treatment and can fly at an altitude of nearly 4,000 feet on the tenth day.

Explaining how flying may affect the pneumothorax patient, Dr. Gellenthien says that when the atmospheric pressure changes abruptly, as it does in traveling by plane, the pressure in the cavity around the collapsed lung does not adjust itself, as the lung is not functioning normally. A pressure is therefore obtained that is greater than that of the atmosphere. "As the pressure in this cavity acts directly on the heart and other organs," he states, "any increase in pressure, if allowed to go high enough, may result in serious difficulty and even death, if the heart and other organs are not able to readjust themselves properly."

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APRIL, 1940

Editorials

THE CANCER CENSUS

For many years we have been saying that cancer deaths are increasing. Some have supposed that this is evidence of a progressive deterioration in resistance to this form of disease. A more logical explanation is that the cancer deaths are increasing because a much larger percentage of the population is now living into the cancer age. Furthermore, accurate diagnosis has permitted a larger percentage of the deaths to be accurately recorded. In spite of the fact that the percentage of old people in the population is still increasing and the diagnoses are better than ever, we are now pleased to report that the cancer death rate in Indiana has remained practically stationary for the past six years. (About 115.0 deaths per 100,000 population per year.) This is an extremely hopeful sign and may well mean that improvement in treatment is counteracting the tendency for the rate to rise. It is not impossible that we may see a decline soon as the public becomes more alert in seeking medical aid and as the profession becomes more expert with surgery, x-ray and radium.

According to all available statistics there are at all times approximately 500,000 people who have active cases of cancer in existence in the U. S. A. Of this number, only about one-third know that they have the disease. The remaining number of people, either through ignorance or carelessness on their part, are deprived of the opportunities of modern medicine in the control or possible cure of cancer.

This is a problem partly for the profession at large to solve. How are we going to meet it? As the saying goes, "The Greeks had a word for it," so does the Women's Field Army of the American Society for the Control of Cancer have a slogan for it, "Fight Cancer with Knowledge!" It is only by disseminating this knowledge to the public that we can even begin to improve on the present situation. The signs and symptoms of early cancer can best be observed by educating the public to semi-annual or annual complete physical examinations. Through a well organized effort on the part of the medical profession and the public, the mortality statistics of pulmonary tuberculosis have been reduced more than ten-fold. With a similar effort in this cancer problem we should be able to accomplish a definite decline in the mortality rate.

The annual death rate for cancer is at present 160,000 in this country. Of this number, about 50% or 80,000 are of the gastro-intestinal tract, 50,000 of the stomach, and 30,000 are traceable to the colon and rectum. The female genitals account for about 28,000 and the breast for about 17,000. In order of frequency, cancer of the stomach stands first, cancer of the colon and rectum second, cancer of the female genitals third, and cancer of the breast fourth.

Educating the public seems to be our paramount problem in achieving real progress in the control of cancer. When one notes the relative cure rate in the large clinics of the world, the matter of education is all the more impressively convincing. The relative cure rate in the early cases is around 60 to 90%, whereas, in the neglected or delayed cases, the rate of relative cures is only about 5 to 7%. It is in the lower bracket of cases that the greatest improvement can be accomplished through a well organized cooperative spirit on the part of all concerned in this movement.

The organization of the Women's Field Army in Indiana is practically the same as the state medical set-up. There is a district commander for each of the councilor districts and a captain with lieutenants for each county and an additional captain for the larger cities. The district councilors and medical society officers have cooperated well during the past year and it is hoped that their scope of helpfulness can be increased to a place where cancer literature will be placed in each home and in each doctor's office in the county. Suitable literature is available at the Women's Field Army Headquarters, Room 362, Claypool Hotel, Indianapolis, Indiana.

The following statistics are approximately correct:

State of Indiana—Deaths 1938

Cancer	3,987
Tuberculosis	1,412
Infantile Paralysis	4

Money Available to Combat These Diseases 1938

Cancer	$5,147.36
(Collected by Women's Field Army)	
Tuberculosis	$1,500,000.00
(Red Cross Seal Sales and State and County Appropriations)	
Infantile Paralysis	$30,000.00
(Collected by the National Foundation for Infantile Paralysis)	

The State Board of Health, the Women's Field Army and the Cancer Control Committee of the

Indiana State Medical Association are cooperating in this educational campaign and ask for the active support of each practicing physician in Indiana.

THE PRIMARIES

A few weeks hence, the voting population of Indiana will choose the nominees for local and state offices, a biennial task that becomes more and more popular because we are becoming conscious of the desirability of choosing representative men and women for these posts. It cannot be said that the 1940 election is "in the bag" for any party. Economic conditions are such that the intelligent voter is using his own head rather than blindly following the mandates of a group of organized men and women. Voters, in the main, have come to the realization that theirs is the duty to elect competent, honest officials and that our courts are becoming fairly glutted with the hearings of cases in which public officials are accused of all sorts of shortcomings, including graft.

We of the medical profession have a special problem this year. It is squarely up to the physicians of Indiana to make every effort to defeat any candidate for the General Assembly who is unfavorable to the profession. Four thousand medical men, men of education, men of discernment, men of ability to think for themselves, can and should exert a powerful political influence at this time.

While no man can undertake to predict what will happen at the November elections, it seems certain that the House and the Senate in the 1941 Assembly will not be the one-sided proposition that it has been for the past few years. However, disregarding the purely political phases of the matter, we have a duty before us, one that calls for decided action on the part of every physician in Indiana, that of seeing to it that enemies of the medical profession in particular and of public health in general are not seated in the coming Assembly.

This is no time to play partisan politics; it matters not if political expediency would seem to demand that you support Bill Jones even though it is well known that he favors the breaking down of the heritage that is ours—a heritage that has come to us down through the years by dint of hard work and much study of medical problems. On the other hand, it is your solemn duty to do all in your power to prevent such folk from becoming lawmakers.

Every county medical society in the state should long since have had at work a local legislative committee. It is not too late now to organize such a committee if there is not one already at work.

The Association's committee stands ready to offer you every assistance. In many instances, this committee is fully cognizant of the attitude of most candidates for these posts and no doubt much of this information already has been sent to your society. There is no reason why headquarters should not have full information as to the various candidates long before the May primaries, and this information may be relayed back to each society so that proper action may be taken.

No one can say what may come up in the next Assembly, but we know from past experience that sooner or later bills dealing with medical legislation will be introduced and some will be unfriendly.

Our interests should not be confined to legislative candidates, for Indiana elects a governor next November, and that official has much to say in the matter of legislation. Only two years ago the legislature enacted two measures in which the medical profession was vitally interested, but they were not signed by the governor. We have the right to know where *all* gubernatorial candidates stand in the matter of things pertaining to medicine and public health, and they should be asked to give signed statements to that effect. It has happened within our memory that men have gone into this high office with the support of physicians who listened to their voluble asservations that, if elected, they would protect the inalienable rights of medical men and see to it that health matters received every consideration; *after* their inauguration, they listened to the siren song of politicians and the medical and health promises were forgotten.

It behooves us to be on the alert to ascertain just where every candidate stands, get him on record in all these declarations, then vote intelligently. Our duty does not end there; we must see to it that our patients and personal friends do likewise.

OUR INDIANA MEDICAL BOARD PROBLEMS

For several years past, matters concerning the Indiana State Board of Medical Registration and Examination have been before the House of Delegates of the Indiana State Medical Association; each time final action has been delayed for one reason or another. Probably the most prolonged discussion of the many problems connected with the Board was held at the last annual meeting in Fort Wayne. Here, too, final action was delayed, and the matter was held over until the coming meeting at French Lick.

There has been considerable discussion of some of these problems, numerous letters on the subject having come into Association headquarters. Each of these discussions has had to do with the strengthening of our present medical laws and there is little doubt in the minds of Indiana physicians that there is dire need of such strengthening.

In the past few weeks we have made a rather extensive investigation as to the present situation through communications with some of the present Board members and with certain Association officials; all are agreed that something should be done to make possible the enforcement of our present laws, perhaps seeking some changes in the medical

practice act as it now stands. In one reply is found this statement:

"If the rank and file of doctors understood the necessity for medical regulation and were well acquainted with the functions of the State Board, there would be no question of their support in some movement to strengthen law enforcement. Medical registration is as old as the state. Back in the early days, when the whole country was one big, rugged individual, one of the first acts of the newly-created state was to appoint medical examiners to pass upon the fitness of those who would practice the healing art. The necessity for keeping the state free from quacks and pretenders, the desirability of maintaining reciprocity with other states, are matters that come right home to every man in our State Association." . . . "The unfortunate incorporation of osteopaths and drugless healers into the medical group has added an infinite amount of work and expense to the duties of the Board, yet very few doctors know anything about this."

There are a few salient facts that should be considered in the discussion of this problem:

First, the fact that the income of the Board remains practically what it was thirty and forty years ago, the only difference being that at present the Board operates on a budget; hence, no matter what the income may be, the expenditures are limited by the state budget committee.

Second, and a most vital consideration, is the undeniable fact that we must have a more strict enforcement of our medical laws if Indiana is to maintain her present position in matters of reciprocity with other states.

The Indiana State Board of Medical Registration and Examination has pioneered in many things. Indiana Board members had much to do with the organization of the Federation of State Medical Boards, an organization that continues to strengthen its position in matters pertaining to the profession of medicine, and it is this same Federation that is beginning to ask some very pertinent questions as to what Indiana is doing in the matter of her medical registration laws.

Recently we saw a letter from an Association committee chairman in which he stated that it was his opinion that the study of "cultism" and of irregular practice would get nowhere until we had set up more adequate enforcement machinery. We believe that Association members are agreed that there exists a dire need for some action on the part of our association. Our Medical Board *must* have something more than a medical law; it *must* have adequate funds for the enforcement of the law. We cannot expect Board members to give more freely of their time than they are now doing; the *six dollars* per diem when engaged in *actual* service for the Board certainly is not sufficient recompense to warrant a member spending several days in checking a violation.

No more than any other member do we like the word *tax* along about the middle of March of each year, when we finally have paid our "annual dues" to Uncle Sam. When the first quarterly installment of State Gross Income Tax is being figured, one gets more than a bit fed up on this tax thing. Yet if we are to get anywhere with medical law enforcement there is just one way by which the "sinews of war" may be strengthened, and this is, of course, through an annual registration fee of two dollars.

We are not unmindful of the protest that arises each time this suggestion is broached, nor have we forgotten that some of our county medical societies have officially thumbed-down any such measure. However, it should be remembered that practically every other registered profession in Indiana has such a tax. Moreover, it is becoming rather common to hear state officials comment on this, to the effect that they see no reason why medical men should be exempt from such a registration fee. *And it is only by an annual registration that we may hope to have an adequate check upon those who are in the healing art.*

We have not properly educated Indiana folk to the desirability of absolute control of the practice of medicine in this state. They do not know that a strict enforcement of the present medical laws would redound to their benefit, else there would long ago have been a popular demand for such enforcement. Having failed to build up such a demand, the problem is ours.

We would prefer to have a *medical* Board, rather than a *mixed* Board, but we do not have this; and not having it, the thing to do is to make the best of the situation. It is our opinion that the Indiana General Assembly, one of these days, will attack this problem; it further is our prediction that when this time comes there will be enacted an annual registration law.

The medical profession of the Hoosier State never has been in the background; it always has been in the vanguard. We firmly believe that it will be to our interest if the coming session of the House of Delegates votes in favor of an annual registration law, and if this is done, our standing with the 1941 General Assembly will be greatly enhanced.

BOSTON CONFESSIONAL

The *American* Magazine for April publishes an article by Dr. Hugh Cabot who again has taken advantage of his former positions to wail about the defects of the present system of medical practice. Dr. Cabot is beating his breast on the mourners bench, making a confessional of his early economic mistakes!

Because he was formerly connected with the University of Michigan at Ann Arbor and then with the Mayo Clinic at Rochester, Minnesota, his opinions are eagerly accepted for publication by lay magazines and his institutional positions are em-

phasized as a background for the authenticity of his expressions.

Dr. Cabot tells of charging surgical fees to correspond with the kind of an automobile the patient owned. Perhaps he was able to collect Cadillac fees in Boston, but such fees never would apply in Indiana. He is hitting below the belt when he attacks the specialists, for he leaves the impression that any doctor may set himself up as a specialist without special training and without qualifications; he naively omits any mention of the fact that the A.M.A. and almost all of the special organizations have been working hard for the past fifteen years to raise the standards in all special groups. It is not an easy task to obtain the certificates of special boards, and it is no longer possible for a man to represent himself as a specialist without proper qualifications and extensive postgraduate work in his specialty.

Dr. Cabot mentions $150 as the ordinary cost of a complete physical check-up—one that includes x-rays, blood tests, and electrocardiograms. This, again, may be a Boston fee; certainly it does not apply to Indiana where a complete examination such as he mentions may be obtained by persons of medium income for less than a third of the cost he quotes.

Dr. Cabot's viewpoint is an extreme one all the way through; he wants to change everything. At the other end of the scale is the ultra-conservative who is against any change in thought or method. Between the two is the great mass of doctors who desire to keep the best in medicine that experience has taught them and who constantly study and accept the best that research and experience offer, and who gradually change—by evolution rather than revolution—to meet the same slowly progressive changes in demand.

Dr. Cabot forgets that only a very small per cent of M.D.'s are surgeons. Most of the conditions for which patients seek relief are medical and functional—not surgical, and one of the first duties of a doctor is to relieve the patient of worry through personal contact. Dr. Cabot is not accustomed to this phase of medical practice—he is used to going to the operating room where the patient is completely ready for the surgery that he performs. He is not called upon to see the patient through the minor difficulties for which the physician collects one and two dollar fees. The big fees of the surgical specialist are best known to him and he has had little opportunity to know about the kind of medical practice that the average physician does—not the extremist or the ultra-conservative, but just the average physician. He has no standard of comparison. It would be well, and probably very interesting, if some of the reformers would make a comparative survey of fees. For instance, the Veterans' Hospitals offer a standard of comparison with private practice; perhaps a balanced survey of that system would prove valuable and from it much good could be acquired and incorporated into the private practice of medicine for all the people, and inevitably the extremist ravings of Dr. Cabot would be shown up for what they are—the confessions of a Boston specialist!

Editorial Notes

It is estimated that 25,000 deaths from cancer could be prevented each year if people were fully informed and took advantage of existing knowledge of the disease.

Throughout the country there are 98,000 blood donors serving 56 communities, says March *Hygeia*. Our county medical societies should seriously consider a blood donor registry. Several such organizations already have started such programs and report great success. On many occasions the need for blood is an extreme emergency and the physician who can call a central office for such assistance finds it a valuable ally.

The Journal of the American Medical Association for March 16th used some eleven pages in abstracting the proposed laws considered by various state legislatures during 1939. Each year this list increases and our legislative committees find their labors becoming more and more onerous. We trust that all this is but a "cycle," meaning one of those things that inflict the American public about every so often.

The Journal office maintains a "scrap book," in which are placed the various letters that come to us, complimentary or otherwise. Two recent additions to this volume arrived during the past few days. One, via Western Union, came from the executive-secretary of the radiological group: "Your March issue is a journalistic triumph." The other comes via postal card from a Logansport member, who occasionally takes time to drop us a note about our work. Both are much appreciated.

In the "112 Year Ago" column of the New Harmony *Times* appears the following, taken from the New Harmony *Gazette* of February 27, 1828:

> A new mode of administering medicine is now rapidly gaining ground in Germany. Instead of the large doses prescribed in this country very minute quantities are given and as it seems frequently with good effect. Of sulphate of quinine the customary dose here being three or four grains, 1-20 part of a grain is ordered.

With the discussion now going the rounds as to the added cost of marriage, just what will our

county clerks do to keep these costs down? 'Tis said, you know, that many clerks have for sale the highly ornate "certificates" and that the applicants for marriage licenses are given plenty of sales talk regarding them. The medical profession is asked to deal gently with hymeneal prospects in the matter of health examinations, yet we hear little or nothing regarding any move to have our county clerks forego the profit derived from these wholly unnecessary certificates.

For several years we have used an electric razor with much satisfaction. On several occasions, these office pests who drop in to sell razor blades and what-nots have mournfully declared that continued use of the electric razor would bring about dire results. First they said we would set up a dermatitis that would be hard to control; that proved to be untrue. Recently one of these high-pressure sales artists told us that we were in imminent danger from the inhalation of the closely cropped hairs. We had no ready answer for that, but continued with the electric. Now comes *The Journal of the American Medical Association* (March 16th issue) with the announcement that there is absolutely no danger from this source, so the electric razor continues its daily chore.

The Hoosier spring infection commonly known as basketballitis again is rampant in Indiana, the temperature elevation being the highest in history because the remaining four teams of the 775 that started the annual tournament include the names of three mysterious strangers, Mitchell, Lapel, and the Hammond Techs. South Side of Fort Wayne has been there before but the other three never have neared the "field house" before. Of course, one cannot predict the outcome, but we want to comment on the beneficial change in tournament plans for the finals. It was believed, for a long time, that the Indianapolis finals were too much of a strain on the growing boys. As it is, the two games necessary in Indianapolis for the finalists should not prove too much for this well-trained group. Basketball is Indiana's very own, not because it originated in this state but, like the tomato, it has become indigenous with us. It is a healthful sport and a clean sport, and one that should prosper.

After several years of deliberation, the Lake County Medical Society has endorsed the organization of an auxiliary. Because of our rather peculiar geographical situation—our members reside in four sizable cities, plus another group in the "south end"—and the cosmopolitan makeup of our membership, this matter had never reached a final conclusion until recently. An organization is being perfected, the officials for the first year are already named, and steps are now being taken to perfect a committee list. All this is under the guidance of Rollen Waterson, executive secretary of the society. We regret that this step has so long been delayed, since we are of the opinion that our better halves can do much to assist our organization program. Now that Lake County is organized, and with an advisor who knows his way 'round, we may expect great things from the women folk of this community.

Morris J. Costello, writing in March *Hygeia* on skin cancer, points out many misconceptions about this rather common ailment. He cites the fact that because of the lack of pain at the site of the growth, these skin cancers commonly are neglected. He also suggests that senile warts, scars following burns and the pigmented moles are very frequently the source of skin cancers. For many years we have made it a routine, when consulted by a patient over forty in whom we have observed these "tumor" growths, to recommend that they have immediate attention. In most cases these patients have sought further advice and have had remedial measures in a short time. It is our opinion that any growth in an individual over forty, located in such a place as to be subject to frequent irritation, should have the attention of one qualified in such matters. Cancer prevention is ever important; it is especially important in such cases as above cited.

In the more recent studies of traffic accidents much attention is being given the pedestrian problem. While it is true that the state traffic regulations definitely define the rights of the pedestrian, the problem remains a most acute one. Much of the trouble is due to the ignoring of the rights of the pedestrian by the motorist, while on the other hand the pedestrian assumes rights that legally are not his. The United States Supreme Court has upheld the right of the pedestrian to complete his crossing of a street intersection, provided he started while the traffic light was in his favor, but many motorists, once they get the clear signal—too many of them when they sight the amber light—apparently are of the opinion that the right of way belongs to them. The fact that so many pedestrians do a bit of "jaywalking" may be due to their feeling that the crossing of a street in the middle of the block is no more hazardous than crossing at a busy corner, even if the light is in their favor. Many communities are making a special study of this problem and it is to be hoped that something tangible may come from it.

Sitting at a suuny window, overlooking the garden plot where later in the summer there will be beautiful flowers, the more prosy task of writing for THE JOURNAL becomes more than a task; it is a job. After some two months in which the sun

rarely appeared, the day opens with a cloudless sky and with Old Sol coming in from the east as though he meant to do something about it. From the window we see the shoots of the crocus and as the sparrows attack the coverings of the tulip beds, seeking material with which to build their nests, the first of the tulips are seen. The grass is assuming its first sheen of the green that will suddenly burst forth in full splendor with the coming of the first of the April showers. Yes, spring seems to be on the way. But the fly in the ointment is that this is St. Patrick's Day—and also Palm Sunday! Just how an Irishman, even though he be Scotch-Irish, can *properly* celebrate the two holidays, without a confliction, is beyond us. Seems that the President, given to changing our holidays, might have foreseen this and changed the one date or the other!

We've said quite a bit about the French Lick meeting, come next October, and since that meeting is some six months in the future, we shall say a lot more about it. Something like one thousand of our members need no persuasion in this matter; it is the remaining twenty-five hundred on whom we are working, and that we want to get interested, for once a member makes the start, he is sure to be a more or less regular registrant at these increasingly popular gatherings. More real enjoyment is crowded into the short space of three days, whether one seeks mere relaxation, scientific enlightenment or entertainment of various forms, than in any other similar space of time. The environments of French Lick Springs Hotel are examples of Nature's most marvelous handiwork. Nestled as it is in the foothills of the Cumberlands, the visitor finds at French Lick scenic beauty such as is found in but few places in this country. If you want to play golf on one of the sportiest courses in America, if you want to ride through the hills astride a Kentucky thoroughbred, or if you want to "just set," then sign up for French Lick. And make your reservation now.

For a good many years we have been messing around the kitchen, during which time we have accumulated some pet recipes that are our particular joy. It has required a lot of time, a lot of study and the waste of a lot of perfectly good food, this thing of trying to prepare a dish, however homely, so that it is just right. Then to have some authoritative magazine come along and attempt to destroy one of our very nicest idols is very disconcerting. Writing in the March *Hygeia*, Harriet Morgan Fyler, Ph.D., talks about food "fit for a king," meaning corned beef and cabbage. We agree that this appelation is well-nigh perfect and we have been wont to serve the dish so that it lives up to its reputation, even though it often is called "Irish turkey." But only to that extent do we agree with the writer. She declares that corned beef ordinarily is over-cooked, that it should be cooked no longer than the accompanying cabbage, which she recommends as 5 to 8 minutes. Our contention is that the corned beef should be *simmered* for three hours or so, the cabbage then dropped in and cooked for twelve minutes. We ask the pardon of our readers for thus entering the culinary field through the columns of The Journal, but when one of our pet foods is so grossly mishandled, we must rise in protest.

The United States Court of Appeals, District of Columbia, does not agree with Judge Proctor, of the Federal Court in that area, in the matter of the suit brought by the United States against the American Medical Association, et al. We have read the full decision and our non-legal mind fails to comprehend parts of the argument presented. However, as we read it, the salient points are that, while the Court recognizes the good that American Medicine has brought to our citizens, there are certain limits beyond which organized medicine may not legally go. For example, they may not legally seek to restrain physicians from doing those things which brought about the present controversy. The Court, by inference, feels that perhaps a trial of the case may bring out evidence showing that a far different state of affairs exists than those alleged in the original indictment. So far, each side has two strikes on it, the final ball probably to be pitched in the Supreme Court. Nor is the medical profession the only group interested in the final decision; an adverse decision will place practically every organization in the country, including labor, on the defensive. We cannot conceive, however, of an intelligent group of jurists classing the noblest of the professions as a "trade."

Regular readers of that delightful monthly publication of the State Department of Conservation, *Outdoor Indiana*, are prone to muse over what the next few decades will bring about in the way of restoration of our woods and waters to their original state, to what degree the wild life once indigenous to this state will be restored, and to what extent the cleansing and the keeping clean of our natural waters will be carried out. Some evidence of what we may expect in later years is apparent in the report that in 1939 more than thirty million fish (nearly all produced in hatcheries operated by the Department) were planted in our state waters. In addition, almost four hundred thousand trout from Federal hatcheries were added to the fish population of Indiana. A few years ago, about one hundred deer were liberated in the forests of southern Indiana; now it is estimated that these have increased until more than a thousand of the animals range those forests, and some of them have been seen more than two hundred miles from the section in which their forbears were liberated.

Truly, the Department of Conservation has done and is doing a mighty good piece of work and those of us who pay our dollar and fifty cents each year for the right to fish and hunt within the state should evince our appreciation therefor.

According to *Time* magazine (March 11th issue), Hitler's Fuhrer of National Socialist Health, Gerhard Wagner, was a naturopath who licensed all manner of quacks. Last year he died, and his successor is a pediatrician, Leonardo Conti. Dr. Conti has distributed statistics which look favorable in regard to German health, in celebration of the end of his first year as Nazi Health Fuhrer, but Dr. Martin Gumpert, now a refugee in Manhattan but once head of a clinic in Berlin, has pointed out in his book *Heil Hunger!* that the sickness rate among workers is high and the proportion of serviceable young men of military age has dropped from 75 per cent in 1935 and 1936 to 55 per cent in 1938. Reasons for German debility are given as lack of food, lack of rest, and lack of medical care. Dr. Conti points out that the German birth rate in 1932 was 14.8 per thousand; in 1939 it rose to 20.7; but in 1923 the rate was 21.2 and this was the worst year of the German depression. In comparison, Dr. Gumpert points out that Poland's rate is 25, Yugoslavia's 29, and Rumania's 30. Figures on the growth or decline of venereal diseases have not been available since 1934. Dr. Gumpert says that the number of lunatics in German hospitals rose from 185,000 in 1923 to 346,000 in 1936. Dr. Conti and Dr. Gumpert can take the same figures and arrive at entirely different conclusions and Dr. Gumpert's conclusions seem to be more logical. Properly interpreted figures from Germany will supply interesting data and many a lesson for other countries in regard to foolish experiments in medical service.

East is East and West is Kansas and when the two get together, look out for the big surprise that the country will receive. Thus runs the modern political paraphrase of one of Rudyard Kipling's best poems. So when you read in the New York *Times* that "Senator Arthur Capper, Kansas Republican will be the congressional sponsor of a new compulsory health insurance bill drafted by the American Association for Social Security in collaboration with Abraham Epstein"—it means only one thing—that the matter-of-fact conservative veteran senator from the wide-open spaces has tied up with a fellow like Abraham Epstein from New York City because he feels that there's votes in them thar bills supporting compulsory health insurance. The newly drafted Epstein bill provides medical cash and maternity benefits for persons earning less than $1,500 a year.

"The system would be financed through joint contributions from employers, employes and the State, with Federal grants-in-aid to the States provided for," the New York *Times* states.

"Cash benefits would range from $6 a week for a single worker whose normal weekly wage is less than $15, to $15 for a worker with three or more dependents who earns $25 a week or more. No cash benefits would go to workers ill less than seven days. The maximum duration of cash payments would be twenty-six weeks.

"Under the proposed schedule of tax contributions, an employer would pay 40 cents a week for all classes of workers eligible to participate in the system. Deductions from employes' pay would range from 10 cents for those earning less than $15 a week to 40 cents for those getting more than $25. The government's contribution would range from 60 cents a week down to 40 cents."

This may develop into another unholy alliance of the Hitler-Stalin type.

The presidency of the modern, hyper-active state medical society long since has ceased to be just an honor; it has come to be a job and a man-sized job at that. The demands made on the time of that official are ever increasing and we often wonder just how one manages to give the time required. For a good many years past the "head man" in our own Association has done a good job of it; he has traveled over the state, as well as into other states; he has been a student of medical conditions, both locally and nationally. This also is true of the heads of many of our sister Associations. Without seeming to be "choosy," we cannot refrain from a comment on the work of Terry M. Townsend, a New Albany boy who at present is serving as the head of the Medical Society of the State of New York. He travels extensively about the state, addressing both medical and lay audiences, and his talks are so well regarded by the Public Relations Bureau of that Society that they are printed in the weekly bulletin of that committee. Dr. Townsend is an able speaker and has a wide knowledge of medical problems. One of his greatest admirers is our own Dr. William Niles Wishard, whom we reverently term "The Grand Old Man of Indiana Medicine." Dr. Wishard refers to Dr. Townsend as "one of my boys," and being one of Doctor Wishard's "boys" means a lot to those of us who have acquired the title. (Just how we acquired the title we do not know, but we have been thus classed for a good many years.) Dr. Townsend located in New York, soon after his graduation in medicine, being associated with the late Dr. Valentine, a urologist of much note in those days. Later, he came west to spend a year with Dr. Wishard, as a student and assistant. In 1934, on the occasion of the dinner tendered Dr. Wishard, feting his sixtieth year as a physician, Dr. Townsend was one of the principal speakers.

President's Page

THE PRIMARIES

In the next few weeks a primary election will be held. Probably never before has a primary election meant so much to the medical profession. There are many issues, both state and federal, which directly affect the practice of medicine. These issues necessitate careful selection of members of the state legislature, Congress, executive officers, and township trustees.

Recently the American Medical Association received a severe blow in the decision of the Appellate Court which rendered the decision of the lower court of the District of Columbia null and void. This decision is indeed far reaching. It means that not only officers of the American Medical Association but a number of individual physicians must stand trial on criminal charges, and also that the practice of medicine is considered not the learned profession we have always thought it to be but, in the eyes of the courts, it is simply a trade.

The profession is also facing an avalanche of adverse propaganda. Of the many articles appearing in the press, perhaps two deserve special consideration. One appears in the March 9 issue of Liberty, "Doctors on the Operating Table," and another in the April issue of the American Magazine by Dr. Hugh Cabot, "Give the Patient a Break." It would seem that Dr. Cabot's article appearing in a lay magazine was in particularly bad taste. Such an article cannot be of service either in furthering the interests of the public or of the medical profession. He would leave the impression that his experiences in private practice and at the Mayo Clinic were typical of the general practice of medicine, and of the group type of practice. As a matter of fact, his private practice consisted largely of a highly selected clientele and his group practice consisted of work in the Mayo Clinic, which is an unusual organization. He mentioned fees of from $500 to $10,000 in a way that left the impression that such fees are common; most of us know that in a state like ours such fees are exceedingly rare and usually nothing but gratuities. He would eliminate the general practioners altogether.

These incidents make it most important that the profession present a united front. However, it is more imperative that the profession should not entangle itself in the meshes of partisan politics, but should concentrate its efforts on the selection of suitable individuals for public office.

Among the important issues concerning medical legislation, at least three are outstanding:

1. Measures to control sale of drugs, such as barbiturates, sulfanilamide prepartions and poisons.
2. Annual registration of physicians which many believe to be the only practical method of limiting the practice of healing to those who are both legally and professionally qualified.
3. Measure having to do with hospitalization and health insurance.

It is recognized that all three have been widely discussed but, since ours is a democratic organization, it would be well for each county society to hold a special meeting devoted exclusively to such issues to the end that delegates to the next state meeting may properly represent the opinion of each component society.

One of the greatest problems confronting the officers of the State Association is a proper evaluation of the sense of the majority of the profession regarding issues as they arise. The importance of this becomes apparent when decisions must be made concerning legislation or other public relations.

Karl R. Ruckell

THE NEW INDIANA STATE BOARD OF HEALTH BUILDING



The Indiana State Board of Health's new headquarters on the grounds of the Indiana University Medical Center in Indianapolis will be dedicated formally early in May. Exact date for the ceremonies has not been selected.

Although the new structure has not been dedicated, it has been in use since about the middle of December when equipment, files, and furniture of the board were moved from the old headquarters in the Statehouse Annex at West Market Street and Capitol Avenue.

The new structure, designed by the firm of Joseph Wildermuth & Co., of Gary, architects, was erected at a total cost of $334,000. It was one unit in the state institutional construction program authorized by the special session of the Indiana General Assembly in 1938 and, like other structures in the program, was carried out in conjunction with the federal government through the Public Works Administration. Forty-five per cent of the total cost was borne by the PWA and the remaining 55 per cent was paid by the state.

Completely modern, utterly fire proof, the building gives Indiana as excellent a headquarters for its state health department as can be found anywhere in the United States, and it is a far cry from the antiquated, over-crowded building in which the board had been housed for many years. The Statehouse Annex formerly was the home of the Indiana Medical School.

The new building is of steel-reinforced concrete construction, faced with brick, and trimmed with stone; there is practically no wood to be found anywhere in the structure. All floors are of concrete, and doors and interior trim are of metal. The main part of the building is 180 feet long and fifty feet wide, exclusive of the auditorium which extends north from the main structure so that the entire building forms a letter "T."

The building proper comprises four stories, including a ground floor approximately two feet below the ground level. This lower floor houses the vital statistics department which is equipped with steel cases to hold bound volumes of old records, and steel filing cabinets, illustration and exhibits, and the community sanitation offices, shipping, receiving, and storage facilities.

The first floor, which is reached by a broad stairway, houses the information service, telephone switchboard, Hurty Hall, the Bureau of Sanitary Engineering, the Maternal and Child Health Bureau, the Local Health Administration, the Public Health Nursing Bureau, and the Bureau of Communicable Diseases.

On the second floor are the administrative offices of Dr. Verne K. Harvey, secretary of the board, and the office of the deputy attorney general who is assigned to the board. On this floor, also, are the bureaus of Health and Physical Education, Food and Drugs, Dairy Products, and the laboratory of the Food and Drug and Dairy Products Bureaus.

The third floor is occupied by the Bureau of Bacteriology and Pathology offices and the serological laboratory, and the Bureau of Industrial Hygiene.

Laboratory services of the board are complete in every detail and equipment is adequate for Indiana's needs. In the old quarters the laboratory service was cramped.

All serviceable old equipment was moved to the new building.

Hurty Hall provides an excellent meeting place which is available to any medical, nursing, sanitary engineering, sanitation, laboratory, or lay group that has a special public health program. Acoustics of the hall are remarkable and speakers will find their task an unusually easy one. Since physicians, who will meet frequently in Hurty Hall, are so often called from public meetings, a



Fountain and plaque at building entrance

"silent page" system was devised. A large blackboard, lighted from overhead, has been placed on a swinging door at the front of the hall, at the right of the stage. When the telephone operator receives a call for a physician (or anyone attending a meeting) the blackboard can be swung around noiselessly by the operator from outside the hall, the name of the person wanted written, and the board swung back so that the name is visible from the auditorium. There are no windows in the auditorium. It has a seating capacity of about 900 persons. It was named, of course, for Dr. Hurty, former secretary of the Indiana State Board of Health.

The new building has an imposing position on the Medical Center grounds and is about one block north of West Michigan Street.

TWENTY-FIVE YEARS AGO

Items taken from THE JOURNAL of April 15, 1915.

Fewer original articles were used in those days, there being but three. These were from the list of papers read at the Lafayette session the previous September, all of which were unusually long. Eisendrath, of Chicago, discussed "Peritonitis," this paper and the ensuing discussion filling ten pages of THE JOURNAL.

J. H. Taylor, Indianapolis, and his discussants occupied some seven pages in discussing infant feeding, while editor Bulson used six pages to talk about glaucoma.

Four editorials were used in this number, the leading one being a boost for the coming A.M.A. meeting at San Francisco.

In the editorial notes we find a reference to the pending suit of the Wine of Cardui people vs. the A.M.A. Dr. Bulson's comment was highly militant, such as only Bulson could use, when aroused. He also commented on the enforcement of the Harrison Anti-Narcotic Act and the then rather new Federal Income Tax.

There were to be twenty-seven graduates from the Indiana Medical College, the following June. From June 25, 1914, to April 1, 1915, the University Hospital had a total of 875 patients.

Considerable space was given the story of a banquet held in Indianapolis on March 12, in honor of State Board of Health secretary, Dr. J. N. Hurty. Many guests from outside Indiana were present and the list of speakers included Governor Ralston, who presided at the dinner, Vice-President Marshall, Harvey W. Wiley, Victor C. Vaughan, A. T. McCormack, and W. A. Evans.

East Chicago had organized a local medical society with Drs. Schlieker, Spear and Goldberger as officers.

The Duke's Hospital, Peru, was recently reorganized.

UNDER THE CAPITOL DOME

The Indiana State Board of Medical Registration and Examination held a meeting March 26. The session was held in the Lincoln Hotel in Indianapolis.

SYPHILIS AMONG PRISONERS

Among the twenty-six hundred men now confined in the Indiana State Prison, 375 are receiving treatment for syphilis, according to Dr. P. H. Weeks, prison physician.

Wassermann tests are given to each prisoner upon his admission to the institution, and the number of admissions showing positive Wassermanns varies from year to year. During the last fiscal year, ending June 30, 1939, twenty-one per cent of the tests of new prisoners were positive.

Dr. Weeks said that quite a large percentage of the men with positive Wassermanns deny knowledge of having been infected with syphilis before their entrance to the institution. Investigation has revealed that a considerable number of the men in prison who have the disease were infected with it during their early adolescence and have had but little treatment. Many of them, no doubt, have hereditary syphilis.

During the last fiscal year, Dr. Weeks said, a total of 4,421 intravenous treatments of salvarsan were administered to infected prisoners. Under prison health regulations, all cases of acute syphilis are held in isolation until active manifestations have subsided.

"The extent of treatment of syphilis depends to a degree on the individual's condition, previous treatment, length of sentence, and other factors," Dr. Weeks said. "If he was admitted with acute syphilis and is serving a one-to-five-year sentence, he will receive thirty-six intravenous treatments of salvarsan with mercury and bismuth intramuscularly, and also oral treatment. At the time of his parole, if he presents no active symptoms of syphilis and there are no neurological findings, and nothing to reflect on his mental status, the medical department does not recommend that he be held in the institution longer for treatment. Such cases are referred to the board of health authorities in the county where they are paroled, with a report of the venereal treatment, blood test, and other data."

Dr. Weeks said that it is very seldom that the prison medical department finds inmates with acute gonorrhea on admission to the institution. "This," he said, "evidently is due to the fact that they are held in jail for several weeks or months before being sentenced to prison."

During the last fiscal year a total of 561 men were received at the prison, and of this group 42.7 per cent gave a history of having had venereal disease in some form.

A study of that part of the prison population serving sentences imposed for the various sex crimes of the statute books showed some interesting facts.

Behind the prison walls now are 338 men sentenced for sex crimes. This amounts to 12.7 per cent of the total prison population. The average age of these sex offenders is 42 years.

Marriage status, apparently, was not a determining influence in commission of sex crimes. Dr. Weeks' investigation showed that 173 of the sex-offense group, or 51.1 per cent, were married when the crime was committed. Seventy-seven, or 22.7 per cent, where single men, while 42 of them (12.4 per cent) were widowers at the time they committed their crimes. The remainder, 34 men, or 10 per cent of the total of those imprisoned for sex crimes, were divorced at the time they committed the crimes for which they were sentenced.

Neither, apparently, did previous imprisonment for commission of sex crimes serve as a deterrent for at least a sizable group of these prisoners, because of the 338 men held on sex crimes, 10 per cent, or a total of thirty-seven, had previously been convicted for similar crimes, Dr. Weeks' study revealed.

No apparent correlation between infection with syphilis and commission of sex crimes was shown by the study, since of the total group of sex offenders only 66, or 19.5 per cent, showed positive reaction to Wassermann tests, the prison physician found.

The study was made by Dr. Weeks at the request of John H. Klinger, director of the Division of Correction in the Department of Public Welfare.

CORRESPONDENCE

SENATOR MURRAY'S ADDRESS

February 15, 1940

To the Editor:

Your letter of January 24, enclosing for my consideration copy of Senator Murray's address before your secretaries' conference, on the general subject of the Wagner Bill, was received January 26. I certainly thank you.

I agree with you that it was probably quite worthwhile having Senator Murray address your group, under the circumstances. His address is a perfect example of senatorial treatment of a highly debatable subject, in which the Senator has taken sides and in which he really is interested. I have read the address carefully, and it is at the same time direct and evasive, if you can figure that out. That is what I mean by senatorial style. It is encouraging to note that the Senator now feels that nothing can be done along the lines of the Wagner Bill, except with the cooperation of the medical profession, and that compulsory health insurance is not the answer. The Senator could have found all of this out much earlier. Indeed, he told me, at Washington, nearly the same thing, and yet when his preliminary report on the Wagner Bill came out, it was rather definitely in favor of going on with the whole scheme. The discussion of the work of the Interdepartmental Committee and National Health Conference are shining examples of much in little, or little in much, whichever it is. He makes no note of the fact that the whole thing was a frame-up, including the National Health Conference, itself. He knows that's true. I would not expect him to admit it, of course, but if he wanted to do the right thing, he would not bear down upon this fine background for the set-up. In short, none of the evidence he is giving in that particular is worth a tinker's dam.

He says a good deal about the fine objectives of the bill, and goes on to say that the medical profession has agreed in the matter of objectives, and rather grudgingly admits, more between the lines than in them, that the problem could be worked out without all the folderol involved in the Wagner Bill, and yet he insists on having it. Logically he leads up to the posing of getting something done about it, and then illogically insists that it be done along the lines of the Wagner Bill, if, as he says, with some amendments. He is rather careful not to say what they are.

I don't know whether Senator Murray is himself fooled, or whether he thinks he can fool other people, when he makes such laudatory references to the great labor organizations in this country, in this connection. I was at the Health Conference, as I think you were, and saw the pitiful spectacle presented by the two organizations concerned, clearly trying to get something for nothing, and the C.I.O. refusing to make any contribution whatever to the cause.

The Senator speaks glibly of millions who are self-supporting and able to pay all the necessities of life, and yet not pay for medical service. Surely he heard enough before the Subcommittee of which he was Chairman, at Washington, to know that he greatly exaggerated the situation in this part of his talk. He knows that the figures set up by the Interdepartmental Committee are based upon the assumption that all who do not make as much as eight hundred dollars per year, are in need of medical service and cannot buy it. He does not realize (or does he?) that no such rule could possibly apply in the South, and certainly not in the Southwest, and that, as well brought out in our survey, the figures have become nearer forty thousand than forty million. I was a little amazed at his reference to the endorsements accorded the Wagner Bill by so many and such important organizations. He may have been a little more specific and said that nine out of ten of the organizations endorsing the bill were either strictly socialistic in type and practice, or else had a selfish interest in the matter. His references to the professional group which endorsed the bill are rather

keen, as well as that to the American Medical Association, which two statements taken together might make it appear that the American Medical Association was entirely agreeable to the suggestions of the National Health Program, except in some minor particulars.

Again I was amused at the references the Senator made to the proposed Department of Health with a Secretary in the cabinet of the President. He preached much of the impracticability of the suggestion, failing to realize that he is also talking about another impracticability, that of federal direction and control of the practice of medicine. In the face of such a proposition, the aforementioned new portfolio in the cabinet of the President would be child's play. He observed, however, that "this plank in the platform is obviously a counsel of perfection which must be tempered by practical and realistic considerations." I hope he realizes the forcefulness of this observation that, if it is appropriate anywhere, it is in connection with any proposed plan for the control and distribution of the practice of medicine.

I am a little encouraged by the observation of the Senator that there is no basic disagreement between the American Medical Association and objectives of the Wagner Bill; that minor differences and details can easily be ironed out by conferences of those concerned on both sides of the question. I wonder if the Senator realizes that we have turned handsprings and strained our backs to do just that, and to no avail. Really, somebody should tell him these things!

But the queen bee of the entire address is next to the last paragraph on page 7 of the mimeographed manuscript. I won't take time to discuss that. If the evidence the representatives of the American Medical Association presented to the Subcommittee over which the Senator presided has not convinced him that revolutionary procedures are envisioned by the bill, the situation is hopeless, so far as he is concerned.

But I don't know why I am taking your time and mine, discussing all of these things. I am like the preacher at the Wednesday night prayer meeting, who is saying what he wants to say, and his audience is hearing what it wants to hear, and neither of them needing any of it. Just a little indulgence.

Very truly yours,

Holman Taylor, M.D., Secretary,
State Medical Association of Texas.

WARNING: THE JOURNAL has received information that two men, father and son, are calling upon physicians asking for morphine for the father who supposedly has cancer of the stomach. It is believed that one or both of the men are addicts. The father is about seventy-five years old and, according to one physician who examined him, has no indications of cancer.

Deaths

Don Ayres Anderson, M.D., of Indianapolis, died March seventeenth, aged sixty-seven years. Dr. Anderson graduated from Central College of P. and S., Indianapolis, in 1895 and was a member of the Indianapolis (Marion County) Medical Society, the Indiana State Medical Association and the American Medical Association.

John T. Jessup, M.D., Elwood's oldest resident, died February tenth, aged ninety-one years. Dr. Jessup taught school as a young man, and studied medicine at Indiana Medical College, Indianapolis, from which he graduated in 1873. He located at Curtisville in 1876 and continued in practice there until his retirement in 1910 when he went to Elwood.

Andrew S. Newell, M.D., of Converse, died March fifteenth in a Marion hospital, after a long illness. Dr. Newell, aged sixty years, had served for eight years as coroner of Miami county. He was a graduate of the University of Louisville School of Medicine and was a member of the Miami County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association.

James M. Miller, M.D., aged seventy-nine years, veteran Decatur physician, died February sixteenth, after a long illness. Dr. Miller was a graduate of the Medical College of Ohio, Cincinnati, in 1886, and was an honorary member of the Adams County Medical Society and the Indiana State Medical Association.

William Gardiner Symon, M.D., Garrett eye, ear, nose and throat specialist, died suddenly, February twenty-fourth. Death was due to heart disease. Dr. Symon was fifty-four years old. He came to Garrett from Colorado in 1920 when he became a member of the staff of the Garrett Clinic and later became a partner of Dr. M. E. Klingler in the ownership of the Clinic. He was a graduate of the University of Colorado School of Medicine, Denver, in 1913, and was a member of the American Academy of Ophthalmology and Otolaryngology, was granted the certificate of the American Board of Otolaryngology, and was a member of the DeKalb County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association. In addition, he was an active member of numerous civic organizations.

HORACE W. REID, M.D., retired physician of Oakland City, died February twenty-eighth, aged eighty-eight years. He graduated from the Physio-Medical Institute, Cincinnati, in 1910.

JAMES B. ELLINGWOOD, M.D., of Fortville, died March eighth in an Indianapolis hospital after an illness of several months' duration. Dr. Ellingwood was fifty-eight years old. He graduated from the Physio-Medical College of Indiana, Indianapolis, in 1881, and had practiced in Fortville for thirty years where he had operated the Ellingwood Medical Clinic for the past eighteen years, and for the past seven years had been Hancock county health commissioner. Dr. Ellingwood was a member of the Hancock County Medical Society, the Indiana State Medical Association, and the American Medical Association.

OTTIS LIKE, M.D., of Monroe City, died February twenty-first, aged fifty-eight. Dr. Like was not in active practice. He graduated from the Washington University School of Medicine in St. Louis in 1911.

GEORGE C. KASDORF, M.D., of Michigan City, died February twenty-first, aged sixty-eight years. Dr. Kasdorf was born in Berlin, Germany. He graduated from the Long Island College of Medicine, Brooklyn, in 1907, and for many years was a member of the Porter County Medical Society, the Indiana State Medical Association, and the American Medical Association.

JOHN EDWARD MCARDLE, M.D., prominent physician of Fort Wayne, died March seventeenth. Death resulted from a cerebral hemorrhage. Dr. McArdle was fifty-five years old, and had practiced in Fort Wayne since his graduation from the Indiana Medical College, School of Medicine of Purdue University, Indianapolis, in 1907. Dr. McArdle was a former president of the Fort Wayne St. Joseph Hospital staff and had served as coroner for Allen county. He was a member of the Allen County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association.

MAY 6-11, 1940

ANNUAL POSTGRADUATE COURSE

I.U. SCHOOL OF MEDICINE

See preliminary program on page v

News Notes

Dr. George S. Row, of Osgood, was injured in an automobile accident, March first, when his automobile struck a bridge. The accident occurred as Dr. Row was going to make a call in the early morning hours.

Dr. C. R. Slick, Richmond, has been named temporary director of District No. 3 of the State Health Department at New Albany. He will serve until the return of Dr. C. K. Kincaid from the University of Michigan, where he is taking postgraduate work in public health.

Dr. W. R. Cleveland, of Evansville, was principal speaker at a dinner meeting of the Evansville Society of X-ray Technicians, February twenty-seventh. His subject was "Reminiscences of Twenty-five Years of Radiology."

Dr. V. K. Stoelting, of Winchester, was slightly injured in an automobile accident, February sixteenth, when his car skidded on the ice.

The Marshall County Medical Society is sponsoring a series of newspaper articles in the local newspapers on various phases of public health. The first of the series dealt with the new marriage law requirements.

Franklin S. Betz, retired manufacturer of surgical instruments in Hammond, died February twenty-eighth.

Dr. Robert Staff, of Richmond, has been appointed superintendent of the Indiana Tuberculosis Sanatorium at Rockville to succeed Dr. J. V. Pace, who has been appointed superintendent of the new tuberculosis hospital at New Albany. Each will assume his new duties on May first.

Dr. James A. Craig, of Greenwood, spoke before the Lions Club of that city, January twenty-ninth, on the subject of "Education and Health."

The American Public Health Association has recently adopted a report on the Educational Qualifications of Health Officers. The report is distributed free and may be secured from the Association, 50 West Fiftieth Street, New York, N.Y.

The sixty-ninth annual meeting of the American Public Health Association will be held in Detroit, Michigan, October 8-11, 1940. The Book-Cadillac Hotel will be headquarters.

General John J. Pershing was awarded the William Freeman Snow Medal for distinguished service to mankind at the annual meeting of the American Social Hygiene Association in Chicago, February first. General Pershing was one of the founders of the national antisyphilis committee.

Dr. Eugene L. Bulson of Fort Wayne was the guest speaker at the joint meeting of the Lima Academy of Medicine and the Triologic Society, March nineteenth, at Lima, Ohio. Dr. Bulson's subject was "Symptoms and Diagnosis of Foreign Bodies in the Air and Food Passages."

There are more than 5,000 quack "cures" for cancer on record. Tell your patients that the modern treatment of cancer employs surgery, x-rays, or radium, or a combination of these methods. No other instrumentalities are recommended.

The development of the 225-ton medical or "atom-smashing" cyclotron of the University of California brought the Nobel Prize in physics to Dr. Ernest Orlando Lawrence, of Berkeley, in the latter part of 1939. Human cancer patients now are being treated with the neutron rays produced by the cyclotron.

Announcement has been made of the establishment of a medical advisory division in the Federal Trade Commission in Washington. The director of the unit will be Dr. Knox E. Miller, who has been on duty with the commission since 1938 as technical consultant to advise on medical and other claims made in advertising of foods, drugs, and cosmetics. The personnel of the division will include Drs. Miller, Charles F. Church and Frederick C. Warnshuis.

April is Cancer Control Month. Enlist in the Women's Field Army. The Field Army suggests three measures that should be impressed upon the laity. They are:

1. Have a comprehensive physical examination once a year. Women over thirty-five should have what the American Society calls the B.P. examination (breast and pelvic areas), semi-annually.

2. Memorize the cancer danger signals: any persistent lump or thickening, particularly in the breasts; any irregular bleeding or discharge from any body opening; any persistent and unexplained indigestion; any sore that does not heal normally, especially about the tongue, mouth, or lips; any sudden change in the form or rate of growth of a mole or wart.

3. Enlist in the Women's Field Army in April, set aside by Special Act of Congress as Cancer Control Month, and so help the Army carry on its work of education to save lives.

The National Advisory Cancer Council held its twelfth annual meeting March 2 and for the first time met at the newly completed $750,000 National Cancer Institute building near Bethesda, Maryland. Applications for grants to cancer research institutions were considered by the Council which, during the past two years, has recommended financial assistance amounting to more than $200,000 for various research projects.

The American Medical Golfing Association's twenty-sixth annual tournament will be held at Winged Foot Golf Club, Mamaroneck, New York, Monday, June 10, 1940. Officers of the A.M.G.A. for 1940 are George W. Hall, M.D., Chicago, president; D. H. Houston, M.D., Seattle, first vice-president; and Bill Burns, secretary, 2020 Olds Tower, Lansing, Michigan. All members of the American Medical Association are eligible for membership in the A.M.G.A. For complete information and registration application, write to the secretary.

During April the Women's Field Army of the American Society for the Control of Cancer will conduct its fourth annual campaign of cancer education. President Roosevelt will issue a proclamation calling attention to the need to "Fight Cancer with Knowledge."

The Indiana Asseociation of the History of Medicine met at the Inlow Clinic in Shelbyville, March twentieth, with twenty-five members and guests present. Dr. W. D. Inlow gave an illustrated talk on the history of surgical instruments, tracing their development from prehistoric times. New officers were elected as follows: Dr. W. D. Inlow, Shelbyville, to succeed Dr. E. F. Kiser of Indianapolis as president; and Mrs. Irene Strieby, Indianapolis, was re-elected secretary-treasurer. The next meeting of the society will be held in May at the Indiana University School of Dentistry in Indianapolis.

A hospital addition to the Caylor-Nickel Clinic in Bluffton has been formally opened. The addition is a three-story structure with a capacity of thirty-five beds.

Dr. Charles F. Kaadt, of South Whitley, recently convicted by a jury in federal court on charges of using the mails to defraud in connection with the diabetes remedy he sells, has been granted a new trial. The next trial, the newspaper reports, probably will be held in the winter term of court, January, 1941.

Dr. G. A. Held has opened an office in Jasper where he will conduct a general medical and surgical practice.

A resolution expressing commendation and appreciation of his service on the general surgery staff of Indianapolis City Hospital was given Dr. John Eberwein, March eighth, by the Indianapolis Board of Public Health when the board approved his transfer to the consulting staff in surgery. Dr. Eberwein has been a staff surgeon at the hospital for more than twenty-five years and he requested to be transferred to the consulting staff.



William D. Stroud, M.D., Philadelphia cardiologist, will be one of the guest speakers on the postgraduate program of the Indiana University School of Medicine, the week of May 6 to 11. Dr. Stroud is cardiologist and director of the Heart Clinic at Bryn Mawr Hospital, is Associate of Medicine at Pennsylvania University and professor of Cardiology, Graduate School of Pennsylvania University. He is treasurer of the Board of Regents of the American College of Physicians and is a member of the Association of American Physicians.

A.M.A. MEETING

The official call has been issued for the ninety-first annual session of the American Medical Association which will be held in New York City, June 10 to June 14. The House of Delegates will convene on Monday, June tenth. The Scientific Assembly will open with the general meeting on Tuesday, June eleventh, at eight p.m.

A schedule of hotels and rates appears on page xiii in this issue.

ELEVENTH DISTRICT MEETING

Speakers for the May fifteenth meeting of the Eleventh Councilor District Medical Society have been announced as follows:

Dr. Samuel Feinberg, Chicago
Dr. H. L. Egbert, Indianapolis
Drs. Jewell and Barnett, Logansport
Mr. "Dusty" Miller, Wilmington, Ohio.

Dr. Feinberg will hold a clinic at ten o'clock in the morning. The usual banquet will be held at six o'clock in the evening, after which Mr. Miller will talk. All meetings will be held in the Hotel La-Fontaine, in Huntington.

TWELFTH DISTRICT MEETING

The Twefth District Medical Society will meet in Fort Wayne, April second. Speakers will include Dr. Austin A. Hayden of Chicago, Mr. Thomas A. Hendricks, executive Secretary of the Indiana State Medical Association, and Dr. Theodore T. Stone of Chicago.

NORTHERN TRI-STATE MEDICAL ASSOCIATION

The sixty-seventh annual meeting of the Northern Tri-State Medical Association will be held at the Battle Creek Sanitarium, Battle Creek, Michigan, April 9, 1940. The program follows:

8:15 a.m.—"Management of Long Bone Fractures," by George J. Curry, M.D., Flint, Mich.

9:10 a.m.—"Relationships between Sterols, Cardiac Poisons, Vitamin D, and Sex Hormones," by Carl J. Klemme, Ph.D., West Lafayette, Ind.

10:05 a.m.—"Pyelitis in the Puerperium," by Fred L. Adair, M.D., Chicago.

11:00 a.m.—"Diverticulitis of the Colon," by Thomas E. Jones, M.D., Cleveland, Ohio.

1:15 p.m.—"Fistula in Ano—Present Day Treatment," by Louis J. Hirschman, M.D., Detroit, Mich.

2:10 p.m.—"Prostatic Diseases," by Vincent J. O'Conor, M.D., Chicago.

3:05-3:20 p.m.—Business meeting.

3:20 p.m.—"Migraine," by David Slight, M.D., Chicago.

4:15 p.m.—"Neuralgias and Trismus Resulting from Mandibular Joint Disturbance," by James B. Costen, M.D., St. Louis, Mo.

6:15-7:15 p.m.—Banquet at Battle Creek Sanitarium.

After dinner speaker will be Walter C. Alvarez, M.D., Rochester, Minnesota, whose subject will be "The Patient Who is Always Ailing in Spite of Many Treatments."

OHIO STATE MEETING IN MAY

A cordial invitation is extended to members of the Indiana State Medical Association to attend the ninety-fourth annual meeting of the Ohio State Medical Association at the Netherland Plaza Hotel, Cincinnati, May 14, 15 and 16. The Executive Secretary of the Association announces that they will be glad to register as a guest any Indiana physician who attends the meeting. The official program for the meeting will be published in the April first issue of the *Ohio State Medical Journal.*

JOINT MEETING OF INDIANA TUBERCULOSIS ASSOCIATION AND INDIANAPOLIS MEDICAL SOCIETY

Two interesting talks will feature the annual meeting of the Indiana Tuberculosis Association which will be held jointly with the regular meeting of the Indianapolis Medical Society on April 16 at the Lincoln Hotel, Indianapolis. This session, which will open at 8:00 p.m., is to be addressed by Dr. J. A. Myers, Professor of Preventive Medicine, University of Minnesota Medical School, Minneapolis, who will discuss "Scientific Procedures in the Diagnosis and Control of Tuberculosis." Following this, Dr. H. E. Kleinschmidt of the National Tuberculosis Association will speak.

On the following day, April 17, beginning at 2:00 p.m., as a part of the Indiana Tuberculosis Association annual meeting program, there will

be an x-ray conference of interesting cases at which films will be presented and discussed. The meeting will be in charge of Dr. Thomas R. Owens, Muncie, president of the Indiana Trudeau Society.

ARMY EXPERIENCE FOR PHYSICIANS

An interesting medical corollary to the augmentation of the United States Army during 1940 and 1941 and to the planned large scale army maneuvers during the spring and summer of 1940 is the broad medico-military experience which a great number of civilian physicians will receive. Medical reserve officers are being used to augment the entire army medical service, which includes everything from small unit installations to large station hospitals, general hospitals, and hospitals designed primarily for the treatment of specific types of cases.

Physicians under thirty-five years of age who are desirous of obtaining extended active duty with the army but who do not hold reserve commissions are being offered appointments in the Medical Corps Reserve in the grade of first lieutenant, in order to permit them to be placed on such duty. Captains and lieutenants are at present being offered excellent assignments throughout the continental United States, and it is hoped that authority will be granted to actually permit some officers to go to Hawaii and Panama. In addition to having a new and very busy experience in the practice of medicine, the average officer finds the pay and allowances attractive. The pay and allowances for a married first lieutenant amount to approximately $263.00 a month; for a single first lieutenant to approximately $225.00 a month; for a married captain to approximately $316.00 a month; and for a single captain to approximately $278.00 a month. In most cases the above pay and allowances would apply inasmuch as government quarters are not usually available for officers on extended active duty. In the few instances where government quarters are available, the amounts would be $40, $60, $60, and $80 less per month respectively. In addition, the officer is reimbursed for mileage traveled from his home to his station, and upon completion of his tour of duty is reimbursed similarly for the travel to his home.

Application for one year of active duty, or for appointment in the Medical Corps Reserve with a view to obtaining one year of active duty with the army, should be requested at once by a letter addressed to the commanding general of the corps area wherein the physician permanently resides. For Indiana it is the Fifth Corps Area (Ohio, West Virginia, Indiana, Kentucky) Fort Hayes, Columbus, Ohio. In addition, the application should contain concise information regarding permanent address, temporary address, number of dependents, earliest date available for active duty, and that internship has been (or will be) completed; and it should be accompanied by a report of physical examination recorded on the Army Form W.D. A.G.O. 63, which may be obtained from any army station. From the group of reserve officers placed on extended active duty since August, 1939, over 25 per cent of those within the age requirements of thirty-two years of age or less for commission in the Regular Army Medical Corps found military service sufficiently to their liking to cause them to take entrance examinations for the regular army.

RED CROSS TO ENROLL MEDICAL TECHNOLOGISTS FOR MILITARY RESERVE

Chairman Norman H. Davis, of the American Red Cross, announced recently that at the request of the Surgeon General of the army and in compliance with its policy of cooperation with both the army and navy, the Red Cross, as an expansion of its peace-time service for the military forces, has undertaken the enrollment of various types of medical technologists who are willing to serve in the medical departments of the army and navy if and when their services are required at the time of a national emergency.

The plan has been under consideration for almost a year, Chairman Davis said, and has no relation to the present war situation in Europe.

The enrollment now being inaugurated will be similar to that of the nurses reserve which the Red Cross has maintained for the army and navy since 1911, and which is now being expanded to include properly qualified male nurses, and also the reserve of dietitians which has been maintained since 1917.

Persons with the following qualifications will be included:

Chemical Laboratory Technicians (male)
Dental Hygientists (male and female)
Dental Mechanics (male)
Dietitians (male and female)
Laboratory Technicians (male and female)
Meat and Dairy Hygienists (Inspectors) (male)
*Nurses (male)
Occupational Therapy Aides (male and female)
Orthopedic Mechanics (male)
Pharmacists (male and female)
Physical Therapy Technicians (Aides) (male and female)
Statistical Clerks (male and female)
X-Ray Technicians (male and female)

The Red Cross will work through the various associations and agencies of which these technologists are members, giving to them the details of the plan, including requirements prescribed for enrollment.

In the event of national emergency, the enrolled male technologists who meet the required physical standards will be eligible for enlistment in the army as non-commissioned officers and in the naval reserve as petty officers. Women technologists and men who do not qualify physically will be eligible for employment by the army as civilians.

* This group will not be members of the Army or Navy Nurse Corps which under basic law is limited to females, but will be used as technologists for service auxiliary thereto.

Women technologists are not eligible for service in the navy.

The navy has indicated that notwithstanding the enrollment with the Red Cross of male technologists eligible for enlistment in the naval reserve in emergency, it is desired that in peace-time qualified personnel actually enlist in the U. S. Naval Reserve. The navy does not require dietitians, occupational therapy aides, orthopedic mechanics or meat and dairy hygienists (inspectors), but all other technologists who may be interested in enlistment in the naval reserve are encouraged to communicate with their naval district commandant from whom they may obtain full information.

Medical technologists belonging to the groups listed above who are interested are urged to write National Headquarters, American Red Cross, Washington, D.C., for full information.

INDIANA'S PROGRAM FOR BETTER CARE OF THE PREMATURE AND NEWBORN INFANTS

On March 1, 1940, the Bureau of Maternal and Child-Health of the Indiana State Board of Health, announced a two-point program which is planned for the improved care of the premature and newborn infant. This newly established program will be under the direction of Miss Mary Ellen Warstler, R.N., of Indianapolis. Miss Warstler was graduated from the Methodist Hospital School of Nursing, Indianapolis, in 1936, and has had postgraduate training at the Cook County School of Nursing in Chicago. Miss Warstler served as supervisor and instructor in pediatrics at the Methodist Hospital in Indianapolis for the past three years. During 1939 she had a leave of absence from the Hospital, at which time she did postgraduate nursing again at the Cook County School of Nursing, devoting all of her time to the study of premature care, and to the study of the Chicago city-wide plan for care of all newborns.

The program for the better care of premature and newborn infants for the Indiana State Board of Health has been set up in accordance with the following outline:

A. *Educational Program*

a. Arranging of programs before local county medical societies, the program to be three point: (1) Nursing Care; (2) Medical Care; and, (3) Public Health Aspects of the Problem.

b. Institutes for nurses and county welfare groups. These are to be arranged during the months of May or June, in four or five strategic centers throughout Indiana. These institutes will be designed for public health nurses, private duty nurses, hospital administrators, and practicing physicians. Preliminary arrangements are now being worked out through the Bureau of Public Health Nursing of the Indiana State Board of Health.

c. Nursing training school consultation services are to be offered to hospitals conducting training schools on the content of their teaching of the subject of the care of the premature and newborn infant.

d. Fellowships for Nurses. The Bureau of Maternal and Child-Health has budgeted for paying tuitions and stipends for three months courses in the care of the premature and newborn infant, as offered by several recognized training centers. Recruiting of these nurses will be handled through the Advisory Committee to the Bureau of Public Health Nursing of the Indiana State Board of Health.

1. Lay Education.

a. Furnishing of speakers and motion pictures and exhibits before lay groups, such as parent-teacher associations, mothers' classes, etc.

B. *Field Services*

1. Consultation by nursing consultant on hospital standards for nurseries as outlined by the standards adopted by the Children's Division of the Indiana State Department of Public Welfare. Consultation services will also be offered to all hospitals on ways and means of obtaining equipment, and establishing facilities for the better care of premature and newborn infants. Hospitals requesting such consultation services will address their requests to the Bureau of Maternal and Child-Health of the Indiana State Board of Health.

2. Provision for the Care of the Premature Infant in the Home and Small Hospital.

The Bureau of Maternal and Child-Health has budgeted for the purchase of fifteen or twenty inexpensive portable incubators. These incubators will be distributed to all areas of the State, and will be available to all practicing physicians of these areas. These incubators will be available for loan through the county hospital, the district health departments, the offices of the county public health nurse, the county health officers, or the county medical societies. Likewise, an emergency supply of these incubators will be held at the central offices of the Indiana State Board of Health in Indianapolis.

3. Lay Participation

An effort will be made to enlist the cooperation of a private agency, such as a statewide sorority, in making part of this program for the care of the premature and newborn infants its health project for the coming three years. Local private agencies could be made responsible for assisting in the improvement of local facilities for the care of the premature and newborn infants, such as refurnishing a nursery; assisting in the purchase of some inexpensive equipment; and for promoting general interest in this subject in their local communities.

Any state group interested in sponsoring this project may consult the central offices of the Bureau of Maternal and Child-Health of the Indiana State Board of Health.

INDIANA UNIVERSITY NEWS NOTES

Needed improvements in physical equipment, administrative organization and teaching technique made 1939 an outstanding year in the progress of the Indiana University Medical Center, the *Quarterly Bulletin* of the Center reports.

"The Medical Center is constantly improving its physical equipment," the *Bulletin* states. "The building of the State Board of Health, with its 38,800 square feet of space, has been completed and occupied. It will be of great mutual benefit to have this department on our campus.

"A new ward for adults has been opened in the Clinical Building, and a ward in Long Hospital of 17 beds has been opened for infectious diseases. The clinical material furnished by these wards will be of immense value to the students and resident staff.

"The operating services of the Long and Coleman Hospitals and Clinical building have been unified and a single sterilizing suite for all the buildings has been established. These changes will give a better and more economic service. Additions in laboratory equipment will facilitate the care of patients and make better the instruction of students."

In the revision of the administrative direction, one of the most important additions, the *Bulletin* states, was the establishment of a full-time admitting officer. Dr. John Van Nuys was appointed to the post to coordinate everything connected with admissions and dismissals.

Among other staff additions, the *Bulletin* relates, was the appointment of Dr. David A. Boyd as full-time head of the department of mental and nervous diseases; Dr. Arthur P. Echternacht as roentgenologist; Dr. Lyle Weed as assistant professor of bacteriology; Dr. Felix Ballenger to a fellowship in research, and Robert Forney as a new chemist in the department of biochemistry and pharmacology.

To further the efficiency of personnel management, Edmond J. Shea, assistant to J. B. H. Martin, administrator, has been placed in direct charge of personnel and is making a study of all departments to determine whether economies can be effected. Mr. Shea succeeded Albert Scheidt, who resigned last summer to accept a position in Chicago. He had served as director of the Medical Records department before being advanced to the position of assistant administrator.

Cooperation with the Indianapolis Board of Health, the *Bulletin* points out, has given the Indiana University School of Medicine the distinction of being the first in the country to provide an extensive two-year course for graduate physicians in the general practice of medicine. Trustees of the university have granted $10,000 annually to the City Hospital for establishment of a full-time staff in the hospital dispensary, thus increasing teaching facilities and enabling the hospital to reduce its dispensary costs by increasing the efficiency of its operation.

Renewed emphasis on postgraduate instruction, it was stated, has increased the service of the medical center to physicians throughout the state. Several hundred physicians attended the week's

STUDENTS OF I.U. SCHOOL OF MEDICINE GUESTS OF LILLY



Students of the Indiana University School of Medicine were guests of Eli Lilly and Company, February 22, 1940, when they spent the day inspecting the pharmaceutical and research laboratories in Indianapolis and the biological laboratories at Greenfield. The students were also dinner guests of the Lilly Company at the Hotel Lincoln, Indianapolis, in the evening, and following the dinner, Dr. W. C. Kelly addressed the group.

course in April, 1939, and a course in otolaryngology was attended by specialists from 20 states.

The *Bulletin* quotes Dr. W. D. Gatch, dean of the Medical School, as saying that "All the buildings and all of the equipment of this great Center, on last analysis, exist for the better training of medical students. This student body represents the very pick, mentally and physically, of the youth of the state. It is being trained to perform one of the most important of all services to society. It consists of men who have already spent four years in college. They demand special methods of instruction.

"It is the opinion of all medical educators that medical students of today cannot be successfully taught by the traditional methods of undergraduate instruction. They are men of mature judgment who are capable of self-direction. They teach one another. The seminar method of instruction is best suited to their needs. This involves reports by the students on assigned topics, and free, informal discussion. The progress of the student can easily be determined by frequent achievement tests in the operating room, classroom and laboratory."

Examinations of candidates for the diploma of the American Board of Internal Medicine were conducted at the Indiana University School of Medicine, February 18-23, for the first time since the board inaugurated the diploma system in 1936 to elevate the standards in this particular field.

The American Board extended its recognition of the school directly by designating Dr. Robert M. Moore, member of the faculty, to conduct the examinations. Dr. Moore was assisted by Drs. C. J. Clark and J. O. Ritchey, also members of the faculty. Candidates included practicing physicians from Louisville, Cincinnati and Indianapolis. They later must take an oral examination conducted in connection with the annual convention of the American Medical Association.

Dr. Gerald D. Timmons, former acting dean and member of the Indiana University School of Dentistry faculty, has been appointed executive secretary of the American Dental Association. Dr. Timmons is the first person to assume the duties of the association which was founded in October, 1938. He will have his headquarters in Chicago.

The following students of the Indiana University school of medicine were initiated into Nu Sigma Nu, medical fraternity, at the annual initiation services and dinner meeting held February seventeenth at the Lincoln Hotel, Indianapolis:

Robert Cornell, Crawfordsville; Robert Horton, Huntington; Alexander Craig, Gary; Everett Gaunt, Anderson; Ernest Price, Greensburg; John DeFries, Milford; Jack Lockhart, Indianapolis; James Logan, Indianapolis; Carleton Keck, Evansville; Charles Kime, Indianapolis; Cyril Van Meter, Bloomington; Tony Nolke, Shelbyville; Carlos Brewer, Bloomington; Ernest Iaconetti, South Bend; John Caton, Terre Haute; Donald Stephens, Marion, and Hiram Sexson, Indianapolis.

Phi Beta Pi, medical fraternity at Indiana University, has announced the pledging of the following students of the school of medicine: William Hare, Evansville; John Butler, Indianapolis; Joe Dukes, Dugger; M. Richard Harding, Indianapolis, and Richard Mason, Mason.

Increased emphasis in dental education on the basic sciences will be facilitated by the transfer, effective next fall, of freshman work in the Indiana University School of Dentistry from Indianapolis to Bloomington, it was announced today by Dean William H. Crawford.

The change, Dean Crawford asserted, will further coordinate the teaching of dentistry with medicine and surgery, will integrate more closely the School of Dentistry with the University in Bloomington, and will be in line with the practice of other leading dental schools of the country.

Approximately forty students who are expected to enter the School of Dentistry next fall will be affected. Since the addition five years ago of another year of pre-dentistry, two years of predental at the University in Bloomington or at some accredited institution have been required before entry upon the four-year course of the School of Dentistry at Indianapolis. Under the new plan, students having the two years of pre-dental work will spend one year on the Bloomington campus and three years at Indianapolis.

"The Indiana University School of Dentistry will take another step forward when the freshman students receive training in the fundamental sciences in the Bloomington division of the School of Medicine," Dean Crawford said. "Plans have been completed whereby courses in gross anatomy, histology, biological chemistry and physiology will be given in the regularly established departments set up by the University for these courses.

"Dr. B. D. Myers, dean of the School of Medicine in Bloomington, and his staff have given considerable thought and study to the arrangements of scientific courses for dental students. Dr. W. D. Gatch, dean of the School of Medicine in Indianapolis, has offered the facilities of the department of pathology, bacteriology, and pharmacology to provide instruction to dental students in these subjects. It is felt that the closer relationship between medicine and dentistry in Indiana will have a beneficial influence on both professions and help to create a more thorough understanding between the two.

"The change in location of the freshman dental work does not affect the two-year pre-dental and four-year dental plan of education. The curriculum will be as before on the two-four plan as outlined by the Dental Education Council. Freshman dental students will be enrolled as at present in the School of Dentistry and dental anatomy will be given by members of the faculty on the Bloomington campus."

SOCIETIES AND INSTITUTIONS

REPORT OF THE SUBCOMMITTEE OF THE INDIANA STATE MEDICAL ASSOCIATION TO STUDY MATERNAL AND INFANT MORBIDITY AND MORTALITY RATES FOR THE STATE OF INDIANA

Meeting held in the Board Room of the new Indiana State Board of Health Building, Indianapolis, on Wednesday, February 28, 1940, at 1:00 p.m. Present at the meeting were: Henry F. Beckman, M.D., chairman; Foster J. Hudson, M.D., James H. Hawk, M.D., James C. Carter, M.D., Howard B. Mettel, M.D., Carl P. Huber, M.D., and Miss Dalya Wildebar, R. N.

At this meeting the Committee reviewed the statistics that had been compiled during the past ten months, and recommended that these statistics be used in the study of the Annual Report which would be submitted to the Editorial Board of The Journal of the Indiana State Medical Association for publication in April, 1940.

The work of the Committee in compiling these statistics is to be continued for another year. The Committee was gratified to note the response of the practicing physicians of Indiana in conducting this study. It was felt that the 1940 report will be invaluable in providing programs for safer maternity and better neonatal care in Indiana. Indiana's record for maternal and infant mortality is enviable as shown by a recent national report which appeared in the monthly publication of the U. S. Children's Bureau, *The Child*, February, 1940. Indiana's maternal mortality rate was 37.0 deaths per 10,000 live births in 1938. The infant mortality rate was 43 deaths per 1,000 live births.

Notwithstanding these figures, a breakdown of the statistics compiled by this Committee show that further improvement can be made. Accordingly, the Committee offered the following recommendations:

1. That the present study of the Committee be continued. Following the completion of the study, the same shall be published in The Journal of the Indiana State Medical Association. Likewise, deductions and comments upon the reports should be published in future issues of this journal.

2. That an effort be made on the part of the statisticians and the participating physicians, to improve the quality of the reports submitted.

3. That whenever possible, the analysis be broken down into a county report and the same mailed to the secretary of the local county medical society, and to the county public health nurse.

4. That each county medical society appoint a maternal welfare committee, which committee would be responsible for developing at least two of their local society programs each year to the following subjects:

 a. A report of all maternal deaths occurring in the respective county, with individual case reports.

 b. An evening program on the subject of the child during the first two months of life.

5. That a copy of the pamphlet, "For Safer Motherhood," which is sponsored by the Maternal Welfare Committee of the Indianapolis Medical Society, be mailed from the offices of the Indiana State Medical Association, and that this pamphlet be accompanied by a letter urging each county medical society to sponsor a similar project at the office of the county clerk, or the marriage bureau.

The societies could also be informed that this printed material could be made available to their respective societies at a very reduced cost, since the printing of a similar folder would require little alteration.

WOMAN'S AUXILIARY

President—Mrs. W. E. Tinney, Indianapolis.
President-elect—Mrs. C. R. Bock, Muncie.
Corresponding Secretary—Mrs. Byron Rust, Indianapolis.
Treasurer—Mrs. C. V. Rozelle, Anderson.

Spring is coming at last, and soon all auxiliary members will be receiving the *News Letter* of the Indiana State Auxiliary, giving news of the National Convention to be held in New York City, June 10-14, with headquarters at the Hotel Pennsylvania. Watch for the *News Letter* and plan now to attend the convention.

Our state organization chairman, Mrs. Fred Wishard, reports the organization of six more auxiliaries, making a total of thirteen new county units for the year 1939-1940. We wish to welcome the new Woman's Auxiliaries to the following County Medical Societies:

Howard County, organized February 22, with Mrs. F. S. Cuthbert, Kokomo, president.

Lake County, organized February 27, with Mrs. E. M. Shanklin, Hammond, president.

Noble County, organized February 29, with Mrs. C. E. Munk, Kendallville, president.

LaGrange County, organized February 29, with Mrs. Harry Irwin, LaGrange, president.

Steuben County, organized February 29, with Mrs. S. S. Frazier, Angola, president.

DeKalb County, organized February 29, with Mrs. John Showalter, Waterloo, president.

The State organization wishes these auxiliaries much success, and is thrilled by the range of contacts which all these new members make possible in carrying forward the auxiliary work.

Mrs. William E. Tinney, our state president, besides being present at the organization of all the

new auxiliaries, has addressed the Marion County Auxiliary, the Madison County Auxiliary, the Allen County Auxiliary, the Delaware-Blackford Auxiliary, the St. Joseph County Auxiliary, and the Floyd County Auxiliary.

MRS. CLIFFORD TAYLOR,
Chairman,
Press and Publicity Committee

THE MARION COUNTY AUXILIARY

Officers: Marion County 1939-1940

President—Mrs. Harry A. Van Osdol
President-Elect—Mrs. Fred Gifford
1st Vice-President—Mrs. Frank Gastineau
2nd Vice-President—Mrs. Fred Pettijohn
3rd Vice-President—Mrs. John R. Swan
Treasurer—Mrs. C. E. Cox
Recording Secretary—Mrs. Philip B. Reed
Corresponding Secretary—Mrs. Frank Ramsey
Publicity—Mrs. Dudley Pfaff



Mrs. Van Osdol

The Woman's Auxiliary to the Marion County Medical Society was organized October 22, 1926, at Indianapolis. The present membership is 165. Four annual meetings are held in October, January, March, and May, and have been primarily of a social nature. The purpose of the organization has been mainly to promote friendship among the wives of doctors in the community.

One of the outstanding events of the auxiliary is the annual party given in November for members and families. This party is always well attended and has taken various forms such as dinner dances, Casino Party, Hobby Fair, "Medical Widows' Follies," and this year a Barn Dance and show. In January a joint meeting with the Medical Society is held as a formal dinner dance.

For the past few years the March meeting has been a Public Relations Tea with state auxiliary officers, presidents of county auxiliaries and presidents of civic and literary clubs as guests. This year the meeting was held in the new State Board of Health Building at the Indiana University Medical Center, in the Hurty Auditorium. Dr. Verne K. Harvey, secretary of the State Board of Health, outlined the work of the various departments of the board located in the new building. He also explained the new state marriage law. Dr. Herman Morgan, secretary of the Indianapolis Board of Health, spoke on "Modern Trends of Medicine and Public Health."

A *Hygeia* campaign is supported by the auxiliary, and it was voted this year to use the money earned from commissions on sales to place gift subscriptions in the American Settlement, the Mayer Chapel Community Center, the Y.W.C.A., and Public School No. 2. Contributions have also been made at various times to the state cancer fund, tuberculosis funds, and support was given in the infantile paralysis campaign. The annual health conference, sponsored by the Indianapolis Council of Parent-Teacher Associations for the past seven years, was founded by a doctor's wife, Mrs. William E. Tinney, and has been carried on for the past four years by another doctor's wife, Mrs. Matthew Winters.

In 1933, on National Hospital Day, the auxiliary dedicated a boulder and plaque at the City Hospital to the memory of Indianapolis physicians who have given their services there. These were donated by the auxiliary, which also cooperated with the city park department in planting trees along Memory Lane, a path from the City Hospital to the Indiana University Hospitals.

The monthly bulletin of the Marion County Medical Society gives the auxiliary space for program and membership news.

Have you made your hotel reservation for the 18th Annual Convention of the Woman's Auxiliary to the American Medical Association which will be held in New York City, June 10 to 14, 1940?

The headquarters are at the Hotel Pennsylvania and we are sure you will not want to miss this convention which promises to be an outstanding one. MAIL YOUR RESERVATION TODAY to Dr. Peter Irving, Housing Bureau, Room 1036, 233 Broadway, New York City.

PROGRAM FOR THE MONTHLY MEETINGS IN 1940 OF THE DELAWARE-BLACKFORD COUNTY MEDICAL SOCIETY

April

Roentgenology in non-malignant diseases in general practice. Dr. Bruce Stocking, 15 min.
Discussion: Dr. P. D. Moore, 15 min.

May—(This is the meeting to be held at Hartford City)

Hypertensive heart disease. Dr. Werry, 15 min.
Rheumatic heart disease. Dr. Weldy, 15 min.
Discussion: Dr. Wm. J. Quick, 15 min.

September

Syphilis—Its early treatment. Dr. H. Stewart, 15 min.
Treatment of neurological syphilis. Dr. K. Venis, 15 min.
Discussion: Dr. T. R. Hayes.

October

Gynecological Organotherapy of the Climacteric. Dr. N. Covalt, 10 min.
Menstrual irregularities. Dr. J. C. Silvers, 10 min.
Discussion: Dr. R. M. McMichael.

November

Constipation. Dr. O. M. Deardorff, 10 min.
Colitis. Dr. C. A. Ball, 10 min.
Discussion: Dr. A. Hurley.

J. H. CLEVENGER, M.D., Pres.;
ROBERT D. TURNER, M.D., Sec.

INDIANA STATE BOARD OF HEALTH
BUREAU OF COMMUNICABLE DISEASES
MONTHLY REPORT, JANUARY 1940

Diseases	Jan. 1940	Dec. 1939	Nov. 1939	Jan. 1939	Jan. 1938
Tuberculosis	74	83	145	123	183
Chickenpox	336	393	315	706	507
Measles	38	30	55	45	1481
Scarlet Fever	667	654	540	986	953
Smallpox	25	16	8	296	259
Typhoid Fever	3	4	18	4	5
Whooping Cough	131	196	162	92	121
Diphtheria	70	102	91	99	295
Influenza	154	73	22	49	109
Pneumonia	117	85	31	110	138
Mumps	392	244	257	151	27
Poliomyelitis	3	2	10	0	1
Meningitis	4	5	2	6	6
Trachoma	5	0	0	1	0
Septic Sore Throat	10	5	20	0	0
Tularemia	30	40	6	14	6
Undulant Fever	3	9	8	0	1

MONTHLY REPORT, FEBRUARY 1940

Diseases	Feb. 1940	Jan. 1940	Dec. 1939	Feb. 1939	Feb. 1938
Tuberculosis	93	74	83	127	148
Chickenpox	274	336	393	500	524
Measles	26	38	30	44	2435
Scarlet Fever	849	667	654	1005	780
Smallpox	10	25	16	449	175
Typhoid Fever	15	3	4	11	3
Whooping Cough	149	131	196	101	86
Diphtheria	66	70	102	106	218
Influenza	1115	154	73	1490	83
Pneumonia	142	117	85	111	107
Mumps	494	392	244	264	129
Poliomyelitis	1	3	2	3	1
Meningitis	1	4	5	2	6
Trachoma	6	5	0	0	0
Tularemia	3	30	40	7	2
Undulant Fever	1	3	9	0	0
Encephalitis	3	0	1	0	0
Tetanus	1	0	0	0	0
Erysipelas	2	0	0	0	0
Septic Sore Throat	7	10	5	0	0
Dysentery	1	0	3	2	0
Malaria	1	0	0	1	0

LOCAL SOCIETIES

Bartholomew County Medical Society held a business meeting February twenty-eighth at the County Hospital. Twelve members were present.

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Daviess-Martin County Medical Society members met February twenty-seventh at Dewey's Colonial Cafe, in Washington.

* * *

Dearborn-Ohio County Medical Society members met February twenty-ninth at the Indiana Ideal Lunch Room, in Aurora. Dr. Howard B. Mettel, of Indianapolis, spoke on "Maternal and Child Welfare Activities."

* * *

Decatur County Medical Society held a meeting in Greensburg, February twenty-first. Judge Rolfes spoke on "Changes in 1939 Statute." Eight members were present.

DeKalb County Medical Society members met for a noon luncheon at the Hotel Auburn, Auburn, on February twenty-second.

* * *

Delaware-Blackford County Medical Society held a meeting at the Hotel Roberts, Muncie, February twentieth. Dr. M. J. Moss, of Yorktown, and Dr. William Deutsch, of Muncie, presented papers. Forty members were present.

* * *

Elkhart County Medical Society members met with the Elkhart County Dental Societies, March seventh, at the Hotel Elkhart. Dr. Arno Leshin, of Chicago, spoke on "Plastic Surgery in Jaw Fractures."

* * *

Floyd County Medical Society held a meeting in New Albany, February ninth. Dr. A. N. Robertson, of New Albany, presented a paper on "Toxemia and Hyperemesis of Pregnancy." Attendance numbered thirteen.

At the March eighth meeting, which was also held in New Albany, Senator Roger Phillips, of New Albany, spoke on "The New Marriage Law." Thirteen members were present.

* * *

Fort Wayne (Allen County) Medical Society met at the Wayne Township Relief Center, in Fort Wayne, February twentieth. Dr. Lyman T. Rawles, Dr. Richard H. Miller, and Mr. Walter F. Hayes, township trustee, presented papers. Attendance numbered forty-four.

At the February twenty-seventh meeting, in the Chamber of Commerce Building, Mr. Clyde G. Wilkinson presented a paper on "Low Cost Medical Care in Prescription Writing." Twenty-eight members were present.

Members of the Fort Wayne Medical Society were guests of the Lutheran Hospital, Fort Wayne, March fifth. This was a luncheon meeting. Doctors R. W. Wilkins, A. N. Ferguson, E. H. Schlegel, H. E. Glock, E. R. Carlo, H. V. Scott, J. J. Hayes, and P. P. Bailey, all of Fort Wayne, presented case reports. Attendance numbered fifty-four.

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Fountain-Warren County Medical Society members met in Hillsboro, March seventh. This was a dinner meeting. Dr. E. L. Van Buskirk, of Lafayette, presented a paper on "Failing Vision in Middle and Old Age." Attendance numbered twelve.

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Grant County Medical Society members met in the Swayzee Masonic Temple, at Marion, February twenty-second. This was a dinner meeting.

* * *

Hamilton County Medical Society held its monthly meeting at the Westfield Library, Noblesville, February thirteenth. Dr. M. A. Austin, of Anderson, spoke on "Organized Medicine."

* * *

Hendricks County Medical Society combined with Boone County Medical Society for the first lecture

in a six weeks Postgraduate Course, at Crawleys Hall, Danville, February twenty-ninth. This course is in charge of Dr. Carl Huber and Dr. Howard Mettel. About twenty-five members attended.

* * *

Henry County Medical Society held a meeting at Newcastle, February twenty-second, with twenty-five members present. Dr. C. H. McCaskey, of Indianapolis, presented a paper on "Hoarseness as a Symptom of Laryngeal Disease."

* * *

Howard County Medical Society met at the Hotel Frances, in Kokomo, March first. Mr. James Banash, consulting engineer for the Linde Air Products Company, Chicago, presented a paper on "Newer Methods in Oxygen Therapy." Seventeen members were present.

* * *

Huntington County Medical Society members met at Hotel LaFontaine, Huntington, March fifth. Dr. Wayne Glock, of Fort Wayne, presented a paper on "Fractures of the Elbow Joint." Attendance numbered thirteen.

* * *

Indianapolis (Marion County) Medical Society met February twenty-seventh, at the Indianapolis Athletic Club. Papers were presented by Dr. Carl P. Huber and Dr. Wm. N. Wishard, Jr.

At the March twelfth meeting papers were presented by Dr. G. W. Gustafson, Dr. David L. Smith, Dr. Lawson J. Clark, and Dr. Harold C. Ochsner.

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Jasper-Newton County Medical Society members were the guests of Dr. A. R. Kresler, of Rensselaer, at a dinner meeting at the Jasper County Hospital, in Rensselaer, February twenty-ninth. Dr. James K. Stack, of Chicago, talked on "Fractures of the Lower Arm." Attendance numbered fourteen.

* * *

Jay County Medical Society met March first at the Jay County Hospital, for a dinner meeting. Dr. Donald E. Spahr, of Portland, presented a paper on "The Differential Diagnosis of Acute Abdominal Conditions."

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Knox County Medical Society members met at the home of Dr. M. H. Omstead, Monroe City, February thirteenth. Dr. R. G. Moore, of Vincennes, presented a paper on "Heart Neuroses, Their Diagnosis and Treatment."

* * *

Monroe County Medical Society members met in Bloomington, February twenty-eighth. A film was presented by the Upjohn Company, on "Sterility and Endocrine Gland Effects." Attendance numbered twenty-five.

Muncie Academy of Medicine met at the Hotel Roberts, Muncie, March twelfth, to hear Dr. Alexander Brown, of Rochester, Minn., present a paper on "Sulfanilamide, Neoprontosil and Sulfapyridine, and Their Clinical Applications."

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Northeastern Indiana Academy of Medicine met at Kendallville, February twenty-ninth. Dr. A. Jerome Sparks, of Fort Wayne, was the principal speaker. In addition to his discussion, a motion picture was shown.

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Parke-Vermillion County Medical Society held a meeting at Clinton Hospital, February twenty-first. Dr. M. C. Topping, of Terre Haute, spoke on "Poliomyelitis From an Orthopedic Point of View."

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Perry County Medical Society members met at Troy, February twenty-seventh, when Dr. David Dukes, of Tell City, presented a paper on "Tularemia."

* * *

Posey County Medical Society members met in New Harmony, February twentieth, for a discussion of the Premarital Law.

* * *

Putnam County Medical Society held its regular dinner meeting at the College Inn, Greencastle, February fifteenth. Dr. Kenneth Kohlstaedt, of Indianapolis, was guest speaker of the evening.

* * *

Randolph County Medical Society members held their regular meeting at the Randolph County Hospital, Muncie, March eleventh. Dr. Frederick W. Taylor, of Indianapolis, spoke on "Thyroid Diseases."

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St. Joseph County Medical Society met at South Bend, February twenty-first. Dr. J. P. Greenhill, of Chicago, presented a paper on "Gynecologic Endocrinology." Attendance numbered sixty-seven.

At the February twenty-seventh meeting, Dr. M. E. Whitlock, of Mishawaka, presented a paper on "Recent Developments in Abdominal Drainage."

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Tipton County Medical Society members met at Tipton, March fourth. Dr. W. F. Tranter, of Sharpsville, was the principal speaker.

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Vanderburgh County Medical Society held a meeting at the Vendome Hotel, Evansville, March twelfth. Dr. John E. Dalton, of Indianapolis, presented a paper on "Prenatal Aspects of Syphilis." Attendance numbered fifty.

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Wabash County Medical Society members met at North Manchester, March sixth. A motion picture on "Pentothal in Surgery" was shown. Fifteen members were present.

LABORATORIES APPROVED BY THE INDIANA STATE BOARD OF HEALTH*

Name of Laboratory	*Pathologist*	*Approved Tests*
Ball Memorial Hospital Muncie	L. G. Montgomery, M.D.	Kahn
Clinical Laboratory 445 N. Penn., No. 702 Indianapolis	Elmer Funkhouser, M.D.	Kolmer (Wassermann) Mazzini
Clinical Laboratory of Assoc. Phys. & Surgeons 221 South Sixth St. Terre Haute	Leon L. Blum, M.D.	Kahn Kline
Culver Hospital Crawfordsville	Wemple Dodds, M.D.	Kline Mazzini
Ft. Wayne Medical Lab. 347 W. Berry St. Ft. Wayne	B. W. Rhamy, M.D.	Kolmer (Wassermann) Kahn Kline Mazzini
Holy Family Hospital 205 E Street LaPorte, Ind.	Eugene Birchwood, M.D.	Kahn
Indianapolis City Hospital Indianapolis	H. C. Thornton, M.D.	Kahn
Indianapolis Lab. for Pathology 516 Hume Mansur Bldg. Indianapolis	T. B. Rice, M.D.	Kolmer (Wassermann) Kahn Kline Mazzini
Methodist Hosp. Lab. 1604 N. Capitol Indianapolis	H. M. Banks, M.D.	Kahn
Methodist Hospital 1600 W. Sixth Ave. Gary	E. R. Strauser, M.D.	Kahn
Physicians' Clin. Lab. 646 Bankers Trust Bldg. Indianapolis	V. D. Keiser, M.D.	Kolmer (Wassermann)
South Bend Medical Lab. 531 No. Main St. South Bend	A. S. Giordano, M.D.	Kolmer (Wassermann) Mazzini
St. Anthony's Hosp. Lab. 1021 South Sixth St. Terre Haute	Etta Selsam, M.D.	Kahn
St. John's Hospital Anderson, Ind.	H. R. Alburger, M.D.	Kahn
St. Joseph Hospital Fort Wayne	Metodi Velkoff, M.D.	Kolmer (Wassermann) Kahn Kline
St. Mary's Hospital Lab. Evansville, Ind.	W. C. Caldwell, M.D.	Kahn Kline
Union Hosp. Pathol. Labs. Terre Haute	Leon L. Blum, M.D.	Kahn Kline
Welborn-Walker Hospital 412 S. E. 4th St. Evansville	C. L. Seitz, M.D.	Kahn
Indiana State Board of Health 1098 W. Michigan Indianapolis	C. G. Culbertson, M.D.	Kline Mazzini
Laboratories of all State Health Departments of all other states, laboratories of the U. S. Army, U. S. Navy, and U. S. Public Health Service		Any of the following: Eagle Complement Fixation Eagle Flocculation Hinton Kahn (Standard) Kline (Diagnostic) Kolmer Complement Fixation (Wassermann) Mazzini Flocculation

*** Approved to do serological tests to comply with the premarital and prenatal laws. Further evaluation tests for laboratories will be given early in April (last filing date was March 31) and probably further tests will be given later.**

BOOKS

REVIEWS

ANEMIA IN PRACTICE. By William P. Murphy, A.B., M.D., 344 pages with diagrams, plates and tables. Cloth. Price $6.50. W. B. Saunders Company, Philadelphia and London, 1939.

This is a straightforward, very useful, practical book on the diagnosis and handling of various anemias. The author is well remembered for his collaboration with Minot of Boston in initiating and developing the epoch making treatment of pernicious anemia with liver preparations. His experience is wide and deep, his knowledge certain and sure, and his familiarity with the writing upon this subject extensive and authoritative.

This book is composed of 18 chapters. Three of these are devoted to hypochromic and normocytic anemias, the remainder to pernicious anemia. The context is elegantly simple and direct. There is very little of the ultra scientific speculation to divert the busy practitioner from finding what he wants to know in a hurry. Ample advice is given upon diagnosis, by clinical and laboratory examinations. Of necessity, the physician must be able to make and understand hematologic studies. Here one finds many well illustrated procedures. Notable is the author's emphasis and reiteration on the prompt, timely and intensive use of liver preparations in pernicious anemia.

Welcome indeed are the humorous diagrams, as those of figures 19, 20 and 21, which, while adequately explanatory, help to give a delightful sprightliness to the reading.

TEXTBOOK OF NERVOUS DISEASES. By Robert Bing. 838 pages with 207 illustrations. Cloth. Price $10. The C. V. Mosby Company, St. Louis, 1939. Translation from the Fifth German Edition by Dr. Webb Haymaker.

This is a long known standard work on neuro-psychiatry intended for instruction and use by student, general practitioner and specialist. It continues the high standards of the previous editions.

Its general content and material are presented in a most clear, concise and didactic fashion. The subjects comprise discussion and accounts of various organs, systems, regions, syndromes and diseases of themselves. It is most useful in facilitating accurate localization of lesions in the nervous system. The author has long been famous for another work of his which deals specifically with problems in such localization diagnosis. There is the barest minimum of theoretic and academic details. The reviewer feels impelled to disagree with the author's rather hostile views upon psychoanalysis. Certainly, the groundwork, the growth and development of the various signs and symptoms in the discussion of psychoneurosis could be made much more understandable and intelligible by utilizing the knowledge of this field of Sigmund Freud.

The author pays his tribute to the contributions of American and English neurologists. It would appear, what with chaotic conditions abroad, that the cause and advancement of neuro-psychiatry will have to look to the United States for its support.

PSYCHOPATHIA SEXUALIS. By Richard Von Krafft-Ebing, M.D. 623 pages. Cloth. Price $3. The Pioneer Publications, Inc., New York, N. Y. Authorized English adaptation of the Twelfth German Edition. Introduction and supplement by Victor Robinson, M.D., Philadelphia.

This book has been known to many generations of medical students and enjoyed with a kind of delicious horror or revulsion for its recitation of many kinds of indulgence in sex perversion. It has long been regarded as a kind of pornographic literature, but this is a decided mistake. The author is to be credited with courage and purpose for exposing these cases of such unhappy practices to the eyes of a dumbly unseeing world, making it realize the unexpected abundance of such.

Unfortunately, the more interesting and painful items, the "juicier" things, are still printed in Latin. In view of the fact that most readers cannot translate this language, it appears to the reviewer that it is hardly worth the trouble in these days of thoroughgoing frankness. Again, unfortunately, there is no mention as to how these various kinds of perversive sexual activity came into being; there is only mention of case reports. No one can understand the bizarre, strange and utterly unexpected phenomena without making use of the work in psychoanalysis. Freud has acknowledged with appreciation this casework of Krafft-Ebing. He has explained whereas the other only mentioned.

CANCER. A Handbook for Physicians.

This cancer pamphlet was prepared by doctors who are especially trained and interested in the subject of cancer. They are members of the Connecticut State Medical Society Tumor Committee and the Division of Cancer Research of the State Department of Health.

The book covers the entire field of the cancer problem, including the organization of the cancer work in the State of Connecticut and a short, comprehensive discussion of the three effective methods of treating cancer, namely: surgery, roentgen ray and radium therapy. A chapter is devoted to the value, limitations and methods of biopsy.

There are separate chapters devoted to neoplasms of the skin, the eye, lip and buccal cavity, respiratory tract, thyroid gland, breast, lung, pleura and mediastinum, gastrointestinal tract, genitourinary tract, bone tumors, female generative organs, blood dyscrasia and lymphoblastomata. There is also a chapter devoted to the palliative treatment of incurable malignancies.

The general practitioner in the State of Connecticut is extremely fortunate in having such a comprehensive reference book on the subject of cancer. Each chapter deals with the incidence, etiology, signs and symptoms, diagnosis, treatment and prognosis.

The Editorial Committee of the Tumor Committee of the Connecticut State Medical Society is to be congratulated upon the very practical manner in which this subject is presented.

BOOKS RECEIVED

TEN YEARS IN THE CONGO. By W. E. Davis. A story of Africa. 310 pages. Cloth. Price $2.50. Reynal & Hitchcock, Inc., New York City, 1940.

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FETAL AND NEONATAL DEATH. A Survey of the Incidence, Etiology, and Anatomic Manifestations of the Conditions Producing Death of the Fetus in Utero and the Infant in the Early Days of Life. By Edith L. Pottery, M.D., and Fred L. Adair, M.D. 207 pages. Cloth. Price $1.50. University of Chicago Press, Chicago, 1940.

THE MANAGEMENT OF OBSTETRIC DIFFICULTIES. By Paul Titus, M.D., obstetrician and gynecologist to the St. Margaret Memorial Hospital, Pittsburgh; secretary of the American Board of Obstetrics and Gynecology, 968 pages, with 368 illustrations and 5 color plates. Cloth. Price $10.00. The C. V. Mosby Company, St. Louis, 1940.

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* * *

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* * *

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THE NEWER NUTRITION IN PEDIATRIC PRACTICE. By I. Newton Kugelmass, B.S., M.A., M.D., Ph.D., Sc.D., attending pediatrician, Broad Street Hospital and Heckscher Institute, New York, etc. 1155 pages with 183 illustrations. Cloth. Price $10.00. J. B. Lippincott Company, Philadelphia and London, 1940.

* * *

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THE NEW INTERNATIONAL CLINICS. Volume 1. New series 3. Edited by George Morris Pierson, M.D., professor of Medicine, Graduate School of Medicine, University

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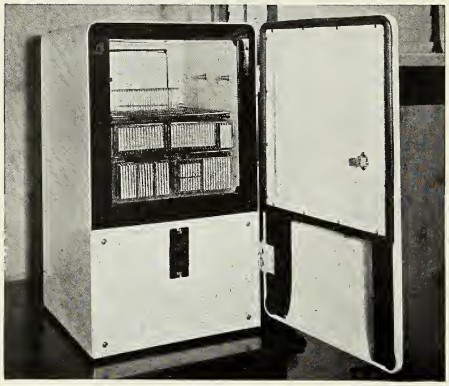
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of Pennsylvania, Philadelphia. J. B. Lippincott Company, Philadelphia, Montreal and New York, 1940.

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SHOCK. Blood Studies as a Guide to Therapy. By John Scudder, M.D., Med.Sc.D., F.A.C.S., from the Surgical Pathology Laboratory of the College of Physicians and Surgeons, Columbia University, and the Department of Surgery, the Presbyterian Hospital, New York City. 315 pages with 55 illustrations and five plates, three in color. Fabrikoid binding. Price $5.50. J. B. Lippincott Company, Philadelphia, 1940.

* * *

THE PATIENT'S DILEMMA. The Quest for Medical Security in America. Hugh Cabot, M.D. 284 pages. Cloth. Price $2.50. Reynal & Hitchcock, Inc., New York, 1940.

* * *

DIRECTORY OF MEDICAL SPECIALISTS CERTIFIED BY AMERICAN BOARDS. By Paul Titus, M.D., Directing Editor. Published for the Advisory Board for Medical Specialists. 1573 pages. Cloth. Price $5.00. Columbia University Press, New York, 1940.

CANCER OF SKIN IS PRECEDED BY ADEQUATE WARNING CHANGES

Cancer of the skin, unlike that of many internal organs, is preceded by changes that usually give sufficient warning to insure complete cure, if a physician is consulted early enough, Maurice J. Costello, M.D., New York, points out in the March issue of *Hygeia, The Health Magazine*.

The recent extensive reduction in the mortality from this type of cancer is evidence of the effectiveness of early attention and proper treatment, he declares.

Skin changes which suggest approaching cancer and should therefore lead one to seek a physician's advice are associated with such common conditions as the senile wart, arsenical wart, scars, especially those following severe burns, and certain birthmarks, especially common pigmented moles. As is true of many types of cancer, lack of pain and a feeling of well being are the chief reasons why the danger signals are neglected.

"The severity of cancer of the skin and mucous membranes of the mouth varies greatly," Dr. Costello says. "Such a cancer may be malignant, spreading to the neighboring glands and other organs of the body comparatively early, or it may be relatively benign or harm-

(*Continued on page xxiv*)

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(*Continued from page xxii*)

less, not spreading to other parts of the body. It is only malignant locally, as it destroys the skin just around its original site. The nonspreading type of skin cancer begins either as a small ulcer, from which there is a slight discharge and a scab formation which drops off from time to time, or as a small red lump which is brittle and is broken off by slight injury, as in shaving or picking. The favorite sites of this type of cancer are the forehead, nose, cheeks, eyelids and chin. Such cancer is curable in 95 per cent of the cases when treated early and adequately.

"The malignant type, which eventually spreads to the internal organs unless treated, usually occurs on the mucous membranes of the tongue, cheeks, lips and ears. This is the type which begins as the senile wart, arsenical wart, scars following burns, etc.

"Senile warts occur on the face, neck and backs of the hands of persons who have been unduly exposed to the elements, especially sunlight," the author explains. "Farmers and sailors are frequently affected as are also persons of blond and sandy complexion, who never become tanned in spite of frequent exposure to sunlight.

"The senile wart begins as a small rough red spot, usually at the site of a freckle; soon a horny brown or black adherent crust develops. The crust falls or is picked off, leaving a rough or bleeding surface, and forms again. This is trepeated many times, and the chronic irritation occasionally leads to cancer.

"Pigmented moles are an important source of skin cancer. The term mole usually refers to a small, pigmented or unpigmented birthmark which may or may not contain hair. Generally they remain stationary and never cause trouble. Most persons have one or several moles. Usually they are only a cosmetic defect. All types of moles should command serious attention. When it comes to treatment, only a trained physician should be consulted.

"There is a potentially dangerous type of mole which occurs most frequently on the head and lower extremities, especially the feet. This type of mole should be kept under frequent observation to determine its behavior, or else it should be surgically removed. It is small, slate colored or bluish black. The surface is smooth and flat or only slightly elevated, and it has no hair. Such a mole, if irritated or inexpertly or incompletely removed, leads to one of the most fatal types of cancer, the malignant melanoma.

"Large scars following severe third degree burns or injuries are occasionally a source of cancer and are therefore considered one of the precancerous conditions. Any change from their usual appearance should be regarded with suspicion.

"White patches, also known as smokers' patches, occur on the inside of the cheeks, the tongue and the lips. They are caused by chronic irritation due to smoking tobacco or sometimes to syphilis. They occasionally split, forming small lumps, at which time the beginning of cancer must be suspected.

"Cancer of the side of the tongue has developed in persons over 40 years of age, who had sharp-edged teeth continually irritating their tongues."

ENCOURAGEMENT IS OFFERED FOR HEART DISEASE PATIENTS

A word of encouragement for those who have suffered from coronary thrombosis or occlusion (in which obstruction by a blood clot of an artery blocks the supply of blood to the muscles of the heart) is given in *The Journal of the American Medical Association* for Feb. 10 by William Hall Lewis Jr., M.D., New York, in his report of the case of a business man who has resumed an unusual degree of physical activity for more than five years following an acute and severe attack of the ailment.

Until recently, Dr. Lewis points out, the condition was considered "immediately and potentially dangerous to life." It is now realized that evaluation must be based on the degree of organic damage resulting from the occlusion.

The subject of the author's report had his original attack when he was 43 years of age. The history of the case follows:

During the three weeks before the acute attack there had been seven or eight periods of discomfort below the breast bone. This usually occurred at the end of a day's work and lasted several minutes. The patient was indulging in athletics and leading an active, intense business life. His attack occurred during the forenoon.

The convalescent program was rigorously followed. It included seven weeks of complete rest in bed in the hospital. The patient remained at home for one month, foregoing business but undertaking physical activity by gradually increasing walks. He then spent six weeks in a sunny clime; usually twelve of the twenty-four hours were spent in bed and lying about on the beach in the morning.

Activities since then have slowly but steadily increased. Full, normal business activity was resumed in two years' time.

Smoking was dropped completely on hospitalization and has never been started again. He has had no coffee at any time, very weak tea irregularly and moderate alcohol irregularly.

Beginning one year after convalescence the following activities have occupied the subject: flying (as passenger and pilot) at various altitudes up to 15,000 feet, dancing, swimming, and skiing each winter at altitudes up to 10,000 feet. All this has been accomplished apparently without detriment.

"This report," Dr. Lewis says, "is published not to stimulate others who have suffered from coronary occlusion to indulge in unusual endeavor but to encourage them in expectation of being able to pursue normal activities without too severe restrictions. The range of activities can be gaged only according to the capacity of the individual."

Another example of the wide latitude for exercise that may be possible for those with heart disease is contained in the same issue of *The Journal* in the report of two Johannesburg, South Africa, physicians on the case of a marathon runner.

Ernst Jokl, M.D., and M. M. Suzman, M.D., relate their experience with a man suffering from a heart disorder in which narrowing of the mitral valve (on the left side of the heart and controlling the flow of blood to the aorta) resulted in improper closing, thus causing the blood in the aorta (the large artery leading from the heart) to flow backward. On examining him before a marathon race in which he was to compete, the authors found that he had heart murmurs during both contraction and dilation of the heart. Although they advised the patient against participation in the race, he stated that he had run in similar races on many occasions without ill effects. He ran in this and subsequent races, and his physical condition, the authors say, "continues to be excellent." However, they report that on three occasions the patient has had typical attacks of circulatory collapse.

"The significance of this case is worthy of note in view of current opinions on the alleged dangers of exercise to persons suffering from valvular disease of the heart," the authors declare. "The recently adopted more liberal interpretation regarding the outcome of systolic murmurs (those occurring during the contraction of the heart) may also be tenable with regard to uncomplicated valvular heart disease presenting diastolic murmurs (those occurring during the dilation of the heart)" when these are due to such causes as were found in this case, or to a backward flowing of the blood in the aorta, of rheumatic origin.

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SULFANILAMIDE IN OLD TRACHOMA

JEAN R. KETTLER, A.B.*

C. W. RUTHERFORD, M.D.†

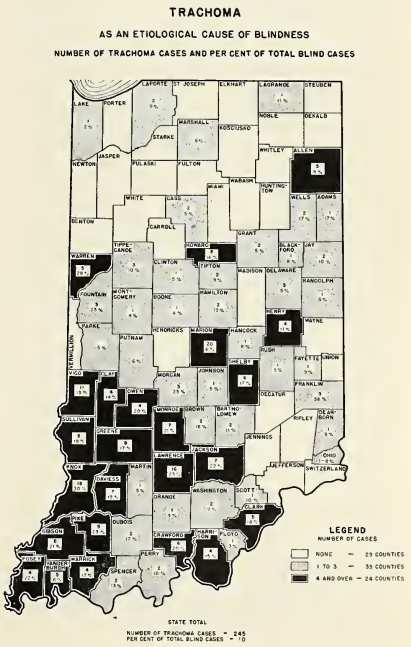
INDIANAPOLIS

The Department of Public welfare, Division of Assistance to the Blind of the State of Indiana, grants monthly assistance to eligible blind persons and provides eye treatment in cases where there is a reasonable prospect of improving existing vision or preventing further loss of sight in progressive blindness, and where the individual meets the eligibility requirements of the Welfare Act.

The extent of the prevalence of trachoma and its ravages in Indiana was not appreciated until the activities of the Welfare Department disclosed it. Departmental statistics (June 30, 1939) reveal that about ten per cent of all recipients of blind assistance became visually incapacitated from the effects of this disease. This figure does not represent the total number of cases in the state because comparatively few adults who have the disease can establish eligibility for blind assistance, and males under twenty-one and females under eighteen years of age cannot be considered for either blind assistance or eye treatment under the Welfare Act.

While trachoma has been a recognized disease for centuries and is widespread in world distribution, no universally accepted treatment has ever been devised to cure it or to control its infectiousness in the home, school, or community. Medical literature in 1938 began to publish reports on the effects of sulfanilamide in cases of trachoma. These and later reports were studied. Valuable information was gained from correspondence with physicians experienced in the use of the drug. Observations were made on patients at Indiana University Medical Center. In due time a plan for using sulfanilamide in the treatment of trachoma among blind recipients was formulated and put into effect by the State Department of Public Welfare.

First of all, it was necessary to determine which patients should be treated. All medical reports that specified effects of trachoma as the cause of blindness were collected from the files, and from the most promising of them were selected the patients to be treated by the new plan. In order



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† State Supervising Ophthalmologist, State Department of Public Welfare.

that all reports of treatment might be intelligently evaluated and correlated, an outline for uniformly administering medication and a special form for preparing and submitting reports at both the beginning and end of treatment were supplied to participating physicians. Their cooperation proved invaluable in completing this study.

Briefly, the plan of treatment for ambulant cases consisted of giving the patient ten grains each of sulfanilamide and sodium bicarbonate three times a day for the first week and twice a day thereafter for from four to eight weeks, and instilling into the conjunctival sac one drop of two and one-half per cent solution of neoprontosil four times a day. Where eyelid deformities were likely to frustrate the attainment of possible benefits, the patient was to be hospitalized and the deformities corrected surgically; during the period of such hospitalization, while the patient would be under close observation by the physician, the daily dosage of sulfanilamide was to be one-third grain per pound of body weight, with a maximum of forty grains, combined with an equal amount of sodium bicarbonate.

The first authorization for treatment was issued on May 22, 1939.

This report is based on completed treatment of sixty-three patients. Eight eyes were blind, one globe was shrunken, and one had been enucleated. Vision was improved in fifty-six of the remaining one hundred sixteen eyes.

Table I shows reported results for the twelve complications most commonly met in trachoma. The relative importance of any complication in a series can be measured by the ratio of its resistance to treatment. Connective tissue invasions (scars) of the conjunctiva and cornea showed only twenty-seven and two-tenths per cent improved. Trachomatous pannus was favorably modified in but twenty-three of seventy-six eyes, while no pannus of the ulcer type responded. Most cases of entropion and trichiasis, alone or combined, had the benefit of surgery in addition to sulfanilamide therapy; half of them showed marked improvement. Iritis was found in forty-two eyes; for the twenty-seven that were healed, it is probable that the iritis existed only because of irritation of the cornea.

There is ample reason for believing that cases of trachoma must be treated early, before complications occur, if blindness from this disease is to be prevented. We submit the following paragraphs in support of this belief.

Patients in this series who were not blind enough to be eligible for monthly assistance were compared to those who were; the former had fewer complications and deformities of eyelids and corneas and made greater gains in visual recovery. Improvement occurred in inverse proportion to the number and severity of complications, so that it is now possible to predict confidently the results of treatment in a given case after having studied the preliminary medical report.

Sulfanilamide has been in use for combating trachoma for more than a year at Indiana University Medical Center. A considerable number of patients, without restriction as to age, have been treated. Adults who had been afflicted for years and had marked complications were not materially benefited, while in younger patients without any complication the results were prompt and gratifying in practically every instance.

The State Department of Public Assistance of West Virginia is enthusiastic over results obtained from identical treatment outlined in this study. There is no age restriction. That their patients are deeply appreciative is evidenced by a gain from forty to three hundrd twenty-four cases within a few months after the treatment program was introduced on June 12, 1939. A mobile unit traverses the affected area once every two weeks. J. A. Arbuckle, M.D., who is in charge of the unit stated: "If caught in its early state the disease can be cured, but if allowed to go untreated for a lengthy period it can only be arrested and patients must take periodical treatments."

Two physicians who participated in the Indiana program voluntarily expressed their opinions in regard to early treatment. One wrote: "There are three children in . . . county . . . twenty, fifteen, and eleven years old . . . we can treat them when they are old enough and blind." The other wrote: ". . . the only hope of eradicating trachoma lies in the early use of either sulfapyridine or sulfanilamide . . . before the opacities, ulcers, and intraocular inflammations have developed. The treatment should be started among children and young people as soon as the disease is discovered." We add our opinion that a systematic survey of the state would disclose many cases now unidentified, especially among younger persons, and that a large percentage of them would prove amenable to early treatment with avoidance of personal blindness and of public liability to spread the disease. The profession should bear in mind that trachoma is a communicable disease, and as such is reportable to the State Board of Health.

There are those who believe that a patient ade-

TABLE I

REPORTED COMPLICATIONS BEFORE AND AFTER TREATMENT

Complications	*Eyes affected*	*Eyes improved*
Blepharitis	48	19
Entropion	59	31
Trichiasis	65	32
Conjunctival scars	111	26
Symblepharon	42	5
Corneal scars	55	13
" nebula	43	16
" macula	31	6
" leucoma	28	12
Pannus, trachomatous	76	23
" ulcer type	11	0
Iritis	42	27

quately treated with sulfanilamide can no longer infect others. Acute exacerbations of old trachoma, with infective secretion, are quickly controlled with this drug. The most conspicuous effect is the prompt relief from pain and photophobia in a large majority of all cases, regardless of the stage of the disease. This spectacular and unexpected good fortune encourages the victim and his afflicted acquaintances to cooperate with their physicians. Many patients refuse to submit further to older forms of management which they have learned to dread, but welcome the painless administration of sulfanilamide. This attitude has been positively demonstrated in West Virginia, where we learned of the case of a young girl who walked twenty miles to meet the mobile unit each clinic day.

CONCLUSIONS

It is our belief that the plan of treatment here presented is effective in arresting the progress of the disease or in leading to some improvement in many established cases, and in curing practically all in whom the infection was more recently acquired and in whom no complication has yet developed.

It is our conviction that early treatment, perseveringly practiced, will prevent blindness, and through the control of each new case of infection, automatically, gradually, and surely eradicate the scourge of trachoma from Indiana.

SYPHILIS OF THE EYE

E. W. DYAR, M.D.
J. E. DALTON, M.D.
INDIANAPOLIS

The ocular mechanism is no exception to the ravages of the Spirochaeta pallida, and the diversity of ocular manifestations which are due to this organism includes all the tissues which are a part of the visual act. Approximately 2% of all eye diseases are luetic in origin. Not all of the eye manifestations have typical clinical signs by which a diagnosis of syphilis can be made upon the nature of the lesion alone, but a few of the lesions at least give suspicious evidences, either by their appearance or clinical course, to allow the physician to be reasonably suspicious of syphilitic infection. It is not to be forgotten that certain eye diseases can be due to other causes, even in the presence of a positive serology. And it is the part of the discerning physician to clinically evaluate whether or not a certain eye lesion is due to the Spirochaeta pallida or to some other intercurrent infection which may inhabit the same individual.

Approximately 4% of all extragenital primary lesions are found on the eyelids or the conjunctiva. These are manifested by a bluish red ulcerative area of variable size. The diagnosis of these lesions can not be made safely upon ocular appearances alone; and the lesions can be confused with other of the infectious granulomata. Of these, one of the most likely to be confused is that of tularemia. The confirmation of the lesion must be made upon the darkfield examination. Aside from tularemia must be considered a particular form of ocular disease, due to the leptothrix which is manifested by a grayish swollen area of the eyelids or the bulbar conjunctiva, accompanied with adenitis of the pre-auricular glands. In the tertiary stage rupial sores must also be considered and the confirmatory evidence will be the presence of a positive serology.

Tarsitis is evidenced by the swelling of the tarsus of either the upper or lower lid; the skin is red, the conjunctiva injected, and there may be swelling of the pre-auricular glands. These patients are usually over thirty years of age, and the tarsitis is a result of the long standing luetic infection.

Primary lesions upon the conjunctiva of the eyeball itself are very uncommon; however, when they do occur, they are usually situated in the lower retrotarsal fold. Accompanying the conjunctivitis will be noted a considerable amount of induration of the surrounding tissues and a grayish white membranous ulcer. In the secondary stage, a type of conjunctivitis has been described in which there are small round papules, pinhead to pea size, and apt to be located about the caruncle. Gummata will be sharply defined and evidenced as a hard, dark, round swelling usually situated near the corneo-scleral junction.

Of the infections of the cornea, the most common is that known as interstitial or parenchymatous keratitis. This is in almost all cases due to the inherited form. The condition occurs mostly between the ages of eight and twenty, although it may be found in infancy and as late as the fourth decade. Other congenital stigmata can usually be demonstrated (Hutchinson's triad). This condition is usually bilateral, but rarely simultaneously so. Months or years may pass before the second eye is involved. The characteristic manner in which a patient afflicted with this disease first presents himself to the physician is almost diagnostic in itself. As a rule it is a child within the above age group, with such intense photophobia that the eyes will be heavily bandaged, the head bowed, and the patient will

shrink from any attempt to examine or manipulate the globe. The appearance of such an eye is one of intense congestion of the vessels about the corneo-scleral junction coupled with a rather characteristic bluish-red infiltration of the deep layers of the cornea. This can be noticed by the fact that the epithelium of the cornea has no areas of discontinuity, as will be seen in corneal ulceration or the one condition with which it might be confused, namely, phlyctenular kerato-conjunctivitis, in which small yellowish papules varying from one-half to two mm. in diameter are usually found about the limbus.

The reaction of the pupil may be sluggish to light stimulation due to the attendant iritis which almost invariably accompanies such cases. The course of this disease is a long one—months, in spite of adequate treatment—and it is not uncommon to find that the second eye will become affected during the process of the anti-syphilitic therapy. Ulceration seldom occurs. After the active stage has subsided, the corneal tissues require months to settle down to their final state. The amount of visual acuity which the patients regain in spite of the severity of the infection is remarkable.

Another rather rare corneal condition which is occasionally seen is known as keratitis pustuliformis profunda which usually occurs in the absence of any injury or of any surface ulceration and is characterized by a sharply circumscribed, deep yellow intracorneal focus. Also there can be noticed the presence of deep infiltrating blood vessels towards the lesion from the limbus.

Involvement of the sclera is a rare complication of syphilis, but it may be the seat of a gummatous process. This is usually manifested by a circumscribed swelling in the temporal and upper quadrant of the eye. The average case subsides in about two months' time following adequate treatment.

Iritis due to syphilis is fairly common. Various authorities have given the incidence as varying all the way from five to seventy-five per cent of all cases of iritis as being due to the spirochete. It is generally thought that approximately forty to fifty per cent of all cases are due to syphilis. While not invariably true, the usual manifestation of this type of iris involvement is that which is termed the plastic in contradistinction to the more chronic or serous. The disease may have its onset any time after six to eight weeks following the primary sore. It generally occurs at a somewhat later stage. In the later or in the inadequately treated cases of syphilis, gummatous involvement of the iris may be seen and is differentiated by the presence of discrete nodules usually about the pupillary margin. Such cases should be vigorously treated because of the plastic nature of the exudate causing adhesions to the anterior capsule of the lens and, as a result, a secondary glaucoma ensues as evidenced by the typical peripheral forward displacement of the iris which is known as iris bombé. As was previously mentioned, syphilitic iritis may occur in those cases which have not had adequate treatment, and which may possess a negative serology. It is sometimes necessary to employ provocative treatments as a provisional measure in those cases in which the clinical evidence is suspicious of this cause and when other evidences of focal sepsis have been definitely eliminated.

Affections of the choroid or middle coat of the eye are frequently caused by syphilis. The ophthalmoscopic appearance is noted to be that of yellowish white round spots about one-half or one-third the size of the optic disc, and involving principally the equatorial or peripheral portion of the eyeground. Changes in the over-lying retina can sometimes be seen and are noted by a cloudy, gray film in the more superficial layers of the retina. A confusing point in the ophthalmoscopic picture, and yet one which is quite characteristic of the disease, is the presence of small dust-like opacities in the posterior portion of the vitreous body. The retina may be raised over the spots of choroiditis, causing distortion of images, especially if the involvement becomes central and affects the macular area. In the quiescent stage the affected areas of the choroid appear as discrete white patches with irregular edges, heavily fringed by black pigment, and showing the retinal vessels passing over the lesion.

Syphilitic retinitis is probably always a manifestation of late secondary or tertiary syphilis. At first it is unilateral, but later both eyes may be affected. The subjective symptoms are smoky vision and night blindness. The visual field is usually considerably contracted. There may be also a ring scotoma. On observation with the ophthalmoscope there is a particularly smoky appearance of the fundus, the disc appears to be enlarged and has a reddish tint. The vitreous contains the dust-like opacities previously mentioned, and some of the appearance in the fundus is due to these opacities. There is a perceptible edema of the retina, especially in the central area. Hemorrhages may occur but they are not constant. The disease, as a rule, is chronic.

The optic nerve is often involved and the lesion that is frequently encountered is primary optic atrophy. The first symptom which indicates that the vision is being affected is difficulty in recognizing colors. Ophthalmoscopic examination reveals a bluish-gray pallor of the disc with clear cut margins. This paleness usually begins at the temporal segment but eventually extends to the entire surface of the papilla. The atrophy is usually bilateral but may be less pronounced in one eye. The course is not regularly progressive but proceeds in stages. The vision may fail rapidly to the point where reading becomes impossible, but may become stationary before the patient can no longer distinguish light from darkness. The lesion

is most frequently confined to the optic nerve itself, but other affections of the posterior portion of the conduction paths of the visual apparatus may become involved.

Lesions of the chiasm are a result of arachnoiditis in the basal cisterna and may result in adhesive bands over the chiasm which will cause pressure atrophy of this particular structure. The beginning symptoms may simulate those of chiasmal disease or pituitary tumor. Cases have been reported of improvement following exposure of the chiasm much in the fashion of a pituitary exploration with the release of the adhesions and resulting improvement in the visual acuity. Aside from the pathologic processes which may occur as a result of the disease, the use of the pentavalent arsencials in the treatment of neurosyphilitic patients is known occasionally to cause distinct damage to the nerve. Visual symptoms of fatigue, flashes of light, metamorphopsia, and night blindness are to be carefully evaluated during the use of such drugs as tryparsamide. Such treatment cannot be pursued with a reasonable degree of safety unless a careful check is made by the use of the ophthalmoscope upon the appearance of the optic disc, coupled with careful visual field examinations which include those for the colors.

Many of the neurosyphilitic manifestations are evidenced in the eyes. Inequality of the pupils as a result of a partial internal ophthalmoplegia is commonly noted. Usually associated with this is a partial paralysis of the ciliary muscle which can be elicited by noting the difference in the nearpoint of accommodation in the two eyes. Unequal pupils are not always to be regarded as positively suspicious of syphilis. The amplitude of reaction to similar light stimulation in the two eyes must be considered and many cases of physiological inequality of the pupils may be noticed.

One of the most frequent of the neurosyphilitic manifestations is that of complete third nerve palsy. The complete ptosis of the lid which, when raised by the hand, discloses the presence of the eyeball rotated outwards and downwards, along with a dilated pupil and loss of accommodative power for the nearpoint, is suspicious of neurosyphilis. About 73% of such paralysis is due to lues. Sixth nerve palsy with inability to rotate one or both of the eyes outwardly occurs in 2%. Such lesions as these are rare in congenital lues.

The Argyll Robertson pupil is very important since it may be the first sign of tabes or paresis. This pupillary phenomenon may be either unilateral or bilateral but is usually bilateral in neurosyphilis. It is found in approximately 45% of all people afflicted with taboparesis. This characteristic pupillary phenomenon is that in which there is loss of reaction to light stimulation but not to accommodation. The presence of miosis or contracted pupil is thought by most authorities not to be a necessary prerequisite in the establishment of the diagnosis of Argyll Robertson pupil.

Syphilis of the orbit affects principally the periosteum and the bone. The bony wall itself may be the seat of secondary involvement from the periorbita or extension of syphilis of the sinuses. The condition is comparatively rare. The margin of the orbit is the most common site of visible and palpable change. The formation of a mass at the upper and temporal margin of the orbit may be the only evidence of its presence. The mass is usually tender on pressure, grows rather rapidly, and is firmly attached to the bone from which it can be distinguished with difficulty because the wide expanding face of the lesion is not sharply demarcated. Gummas of the orbit may be evidenced by unilateral exophthalmos. If a mass develops about the orbital wall or within the orbit during the stage of secondary syphilis, it is referred to as syphilitic periostitis, whereas, if it develops during the late stages of the disease, it is known as osteitis or periosteitis gummosa. The diagnosis of syphilis within the orbit cannot always be made without the aid of roentgenograms. They will reveal that the integrity of the bony structures have not been disturbed. Occasionally such cases are seen in the tertiary stage under the presence of treatment, and a negative serology may be present. The diagnosis may be made from the x-ray coupled with a therapeutic test.

TREATMENT

When syphilis, either of the early or late stage, or reaction to drugs which are used in the treatment of this disease, involves the eye or its adjacent structures, one is often confronted with very definite problems. It becomes the responsibility of the attendant not only to preserve all visual acuity possible, but also to recognize other non-ocular manifestations of the disease which may coexist and which require care. Thus this field often needs the keenest judgment of the trained ophthalmologist and syphilologist working in the closest collaboration. Some forms of involvement will respond very satisfactorily to routine schemes employed for the different stages of the general disease or on general plans for the treatment of reactions, but others frequently will require very special care by rather technical procedures.

If the examiner finds the eye itself or its adjacent parts affected by a lesion of early syphilis, such as an extragenital primary of the eyelid or eyeball, or an iritis of the secondary period, the treatment problem is not so difficult. Here the attack follows the line used in any case of the early disease. In these instances no fear is warranted in regard to untoward developments from the arsphenamines, either in respect to the drug itself or to a Herxheimer reaction.

If one is confronted with an iritis, it is highly important to prevent adhesions between the lens and the iris by instilling, into the affected eyes, a 1% solution of atropine three times daily, until all

inflammatory change has regressed. If adhesions have already formed, this procedure may break them up or it may be necessary to do subconjunctival injections of atropine and cocaine. Where the iris is firmly adhered to the lens and a secondary glaucoma results, operative procedure may be necessary to relieve the intra-ocular tension which, if continued, may lead to permanent damage in vision. As an aid to healing and as a relief for pain, sodium salicylate in rather large doses is frequently of value. During the inflammatory stage dark glasses should be worn as protection against irritation.

A general plan of treatment of early syphilis using a dose schedule of 0.3-0.6 gm. for females and 0.45-0.75 gm. for males follows:

Day or Week	*Neoarsphenamine*	*Interim Treatment*	*Blood Wass.*	*Remarks*
Day				
1	0.3-0.75	Bismuth Salicylate in oil 0.2 gm. with first 4 doses of neoarsphenamine.	1	Complete physical and darkfield if suitable lesion presents. Caution against lapses in treatment. Discuss full aims and expected outcome with and without regular treatment.
5	0.3-0.75			
10	0.3-0.75			
Week				
3	0.45-0.6			
4	0.45-0.6			
5	0.45-0.6			
6	0.45-0.6			
7	0.45-0.6			
8	0.45-0.6			
9	0.45-0.6			
10	0.45-0.6			
11	0.45-0.6			
12		Bismuth as above 4 doses and KI.	1	
13				
14				
15				
16	0.45-0.6		1	
17	0.45-0.6		1	Provocative Wassermann.
18	0.45-0.6			
19	0.45-0.6			
20	0.45-0.6			
21	0.45-0.6			
22	0.45-0.6			
23	0.45-0.6			
24	0.45-0.6			
25	0.45-0.6			
26-31		Bismuth as above 6 doses and KI.	1	
32	0.45-0.6			Examine cerebrospinal fluid at this time.
33	0.45-0.6			
34	0.45-0.6			
35	0.45-0.6			
36	0.45-0.6			
37	0.45-0.6			
38	0.45-0.6			
39	0.45-0.6			
40	0.45-0.6			
41	0.45-0.6			
42-49		Bismuth as above 8 doses and KI.		
50	0.45-0.6		1	
51	0.45-0.6			
52	0.45-0.6			
53	0.45-0.6			
54	0.45-0.6			
55	0.45-0.6			
56	0.45-0.6			
57	0.45-0.6			
58	0.45-0.6			
59	0.45-0.6		1	Patient with seronegative primary may stop treatment here if blood Wassermann always negative. Seropositive primary or secondary patient should have at least five series of the arsenicals. Treatment should continue for one year after the blood reverts to negative. Case with fixed positive Wassermann must be individually decided. Treatment always ends with bismuth.
60-69		Bismuth as above 10 doses and KI.		
70	0.45-0.6		1	
71	0.45-0.6			
72	0.45-0.6			
73	0.45-0.6			
74	0.45-0.6			
75	0.45-0.6			
76	0.45-0.6			

Week	*Neoarsphenamine*	*Interim Treatment*	*Blood Wass.*	*Remarks*
77	0.45-0.6			
78	0.45-0.6			
79	0.45-0.6		1	
80-89		Bismuth as above 10 doses and KI.		
90-142		Probation	12	Blood Wassermann monthly.
143		Complete physical and neurologic examination, spinal puncture and flouroscopic examination of cardiovascular system. If all negative put on further probation.		
Thereafter		Yearly physical and blood serological examination. If both spinal fluid examinations were negative, this need not be repeated.		

Patients presenting late forms of involvement such as gumma of the eyelid, of the sclera, of the iris, or of the orbit, tarsitis, or an iritis, occurring in late syphilis, may, on complete examination, present other grave lesions coexistent in other systems which require that their treatment be individualized. Thus all of these patients should have thorough physical examination, blood and spinal fluid studies and cardiovascular check-up before treatment is instituted. Then, in the event they show no contraindicating sign or any cause for deviating to a special treatment method, they usually can be treated by the plan which follows:

Week	*Drug*	*Dose*	*Interval*	*Remarks*
1-7	Neoarsphenamine	0.45-0.6	Weekly	Physical, Blood, Spinal fluid and cardiovascular check-up.
8-17	Bismuth Salicylate	0.2 gm	Weekly	
18-25	Neoarsphenamine	0.45-0.6	Weekly	Blood Wassermann at beginning.
26-37	Bismuth Salicylate	0.2 gm	Weekly	
38-45	Neoarsphenamine	0.45-0.6	Weekly	Blood Wassermann at beginning.
46-57	Bismuth Salicylate	0.2 gm	Weekly	
58-69	Rest period			
70-81	Bismuth Salicylate	0.2 gm	Weekly	Blood Wassermann at beginning.
82-93	Rest period			
94-105	Bismuth Salicylate	0.2 gm	Weekly	Blood Wassermann at beginning.
Thereafter	Periodic check-ups.			

At this point we come to several ocular manifestations of syphilis which require some special considerations in regard to their treatment.

Chorioretinitis or neuroretinitis may occur in the midst of treatment as an ocular relapse and has seemingly a greater tendency to appear while the patient is on mercury or bismuth, tending to clear again when the arsenicals are resumed. For that reason such a manifestation requires more prolonged series of arsenical. If this should fail in controlling the process, a change in the type of arsenical preparation used, such as from neoarsphenamine to silver arsphenamine or old arsphenamine or the addition of fever therapy, may result in its control.

In interstitial keratitis care should be exercised in keeping the pupil dilated throughout the inflammatory period and in keeping the eye free from irritations and overuse by the wearing of dark glasses. For pain here, as in iritis, the salicylates are often helpful orally. In this condition the iodides lead to much better results when pushed in the higher dosage scales. Unfortunately there has crept into medical literature the erroneous notion that arsenicals are to be avoided in the treatment of this condition. There is no basis for such a view, and it is now agreed that the greatest sheet anchor for good results in these patients lies in the intensified use of this drug. Herxheimer reactions may occur with temporary intensification of the process but they are disregarded. At times even the use of intensified series of neoarsphenamine fail to control the process and in that instance one may have to shift to bi-weekly injections of silver arsphenamine combined with bismuth therapy, or to the use of some form of fever therapy. However, very frequently the process is controlled with the use of a schedule of continuous alternating treatment such as has been outlined for the care of the patient in early syphilis. Below the age of fifteen years, dosages calculated on weight (Sulpharsphenamine 5-25 mgm/kg; neoarsphenamine 5-20 mgm/kg; bismuth salicylate 2 mgm/kg; and 50% U. S. P. mercury ointment for inunctions 1-2 gm) should be used, while above that age usually adult schedules may be employed.

Optic atrophy occurring in syphilis may be primary or secondary in type. The latter occurs chiefly in conjunction with extensive inflammatory lesions of the choroid and retina or as the end result of a neuroretinitis or optic neuritis, and these are relatively unaffected by any form of therapy. Thus no treatment aimed at this lesion is necessary, though treatment of the general disease may be imperative.

Primary optic atrophy occurs in association with central nervous system syphilis and requires early diagnosis. In this condition no amount of treatment composed solely of intravenous arsphenamines, intramuscular bismuth, and oral iodides will be successful in averting blindness or impaired vision, for special procedures are required beginning at the time of diagnosis. If blindness has already resulted when the patient is seen, no treatment will restore vision; if vision is already seri-

ously impaired, we can only hope to stop the degenerative process. Thus the opinion of an ophthalmologist as to the amount of vision remaining is necessary in planning the treatment.

When syphilitic primary optic atrophy is diagnosed early, the best results seem to be derived from combining subdural injections of arsphenaminized serum into the routine treatment with arsenicals, bismuth, and iodide. If, in addition, the patient suffers from a cardiovascular syphilis which prevents the giving of arsphenamine intravenously and the collection of arsphenaminized serum from the patient himself, one can still use an heterologous arsphenaminized serum. As second choice, malaria preceding continuous alternating treatment with the arsenicals, bismuth and iodides is of value. Tryparsamide is never to be used in these cases unless the patient is already completely blind and it is desired as treatment of the underlying central nervous system syphilis.

In the treatment of syphilis with the arsphenamines we are sometimes confronted with signs in the eye structures arising from the drug itself. These may be classed either as true toxic reactions or as therapeutic shock of the Jarisch-Herxheimer type.

Conjunctival hyperemia seemingly is the main if not the sole evidence of the true toxic reactions of the arsphenamines in the eye. It may occur in association with the cutaneous flushing and other signs characteristic of nitritoid crisis or it may occur as an isolated phenomena immediately following or at some time after each arsenical injection to give evidence of a fixed arsphenamine eruption. In the first instance the development of such signs force one into the most extreme caution about continuing the drug and it may require the discontinuance, but in the second circumstance the drug probably can be safely continued.

With tryparsamide therapy, the chief reaction fear lies in the visual damage it may produce. As a sign of this the patient may, at a few to several hours after the injection, complain of dazzling or shimmering of light before the eyes. These symptoms increase in direct ratio to the degree of brightness of the light to which they are subjected. Following upon this a certain dimness of vision may ensue. In about two-thirds of the patients with these complaints, ophthalmologic examination will reveal little if anything but the other one-third will show such findings as concentric contraction of the form fields exhibited chiefly in the nasal, upper, and lower quadrants. If at this time the drug is stopped, no great damage will usually result. Dose size seems to have no direct relation to the causation of these reactions unless one goes beyond the maximal three-gram dosage. The reaction tends to appear somewhere around the third to twelfth injection and if this point is reached without untoward signs, continuance can be carried without fear of these reactions. Thus we see the absolute necessity of close checks with a competent ophthalmologist during the administration of this drug.

CROSSED EYES

J. V. CASSADY, M.D.
SOUTH BEND

Various visual surveys estimate that 8 to 20% of school children have defective vision. Some of these are refractive errors but many are muscle imbalances with or without refractive errors. These visual defects should be discovered and corrected at an early age to conserve vision for it is more difficult to develop fusion after six years than it is between two and five years of age. The fusion faculty and its center is developing between eight months and eight years.

A new born infant is unable to focus his eyes because the ciliary muscle is undeveloped and the lens is round. The child can see neither form nor shape; the macula is not present. At six or eight weeks he discovers his hands, but his eyes may appear crossed or unparallel until six or eight months of age. If at one year they are still not parallel, but crossed or cocked, measures should be taken to ascertain the cause. He will not outgrow this, but on the contrary, the vision of his unused eye will, like an unused hand or foot, never develop.

Many of these crossed eyes, if allowed to remain crossed until school age, become permanently blind or at least cannot be used together with the normal eye for fusion and depth perception. If, however, they are discovered at an early age, not only can vision be conserved, but many of the personality changes that come from taunting by other children may be avoided.

The pediatrician and the general practitioner should, as a part of a general physical examination, examine the child's or adult's vision and eye muscle imbalances. Many physicians already do visual testing as a part of a physical examination. Two Snellen charts are needed, one with letters and the other with the "E" symbol. The chart should have glare-free good illumination with either natural or artificial light of seven to ten foot candles. The chart should be at a distance of ex-

actly twenty feet, and on a level with the eyes of the seated or standing child.

Testing should be done with one eye covered, and the right eye is usually tested first. It is best to let the child first read the symbols on the fifty foot line, and then attempt the smaller symbols until the limit of vision is reached. When the symbol "E" chart is used, the child should be shown how to indicate what he sees by pointing up or down or to the right or left. A movement of the hand or arm points the direction in which the legs of the table are directed. These "E" charts can be used for any nationality or for the illiterate.

A visual acuity of 20/30 in the preschool group is usually considered sufficient unless there are other factors in the examination which would suggest eye difficulty. If a child stands twenty feet from the chart and is able to read the twenty foot line with the right eye, his vision is 20/20 or normal. If he is able to read only the forty foot line with his left eye, his vision is recorded as 20/40. The record should read: right 20/20, and left 20/40.

It must be remembered that this test does not tell the whole story. His eyes may still be under tremendous strain, if he is far sighted, in doing close work. The near point of accommodation can be used to measure this. Suggestive behavior habits, head tilting, blepharitis, rubbing eyes, fits of temper, watery eyes or complaint of headaches may indicate other eye trouble.

An easy muscle test is to have the child look at a white headed pin or flashlight bulb, held at thirty-three centimeters distance from his eyes, and with a card or folded piece of paper covering one eye, shift the card quickly to the opposite eye. Movement of the eye is observed as the card is shifted. After shifting the card back and forth a few times, with the younger child attempting to blow out the light, the covered eye will be seen to move either inward in exophoria or outward in esophoria, as the card is shifted.

A stereoscope could also be used to measure fusion and muscle imbalances, but this is not as accurate as the screen and parallax test described above. The deviation of the eye may be so obvious that such a test is unnecessary, but even the slightest imbalance can be found by this method of testing. If one eye does turn in or out, it will often be found that the child's visual acuity is not as much as 20/200. With these children it is an advantage to test their vision closer to the twenty foot chart, and distances of five, ten and fifteen feet should be marked off on the floor.

There are several ways in which crossed eyes may be cured:

1. By glasses fitted under drops.
 (Far sightedness is one of the most frequent causes of crossed eyes.)
2. By occlusion of the stronger eye to make the weak eye work.
3. By training the two eyes, the weak and strong, to work together.
 (Fusion training)
4. By operation if other methods fail.
5. By a combination of these methods.

Often mothers have noticed that their children's eyes occasionally turn, and when they bring them to the family doctor or pediatrician, they are disappointed that he does not look for or discover this defect. The physician who does discover these defects and does a visual examination of the child will soon be the one whose name is a frequently used one at tea tables when mothers get together to discuss the doctor. Conservation of vision depends upon an early detection of eye defects before the school nurse examines the vision.

TRACHOMA

ORRIS T. ALLEN, M.D.
TERRE HAUTE

It is within the power of the medical profession in Indiana to eradicate trachoma, and if it is not done within the next few years, the profession may be under serious indictment from the standpoint of pure negligence.

Ten per cent of blind pensions in Indiana are due to trachoma. There is apparently little of it in the northern part of the state, but a little careful observation on the part of the profession all over the state will, no doubt, uncover many more cases. A statistical survey by the Department of Public Welfare shows that these cases are most numerous in the southwestern part of the state, along the Ohio river.

The Indiana law requires that all cases be reported to the local board of health. If the physicians will do this, trachoma will soon be eradicated in Indiana.

Trachoma is now readily curable. The earlier the cases are discovered and reported, the more easily and quickly they can be cured. The disease can be checked any time during the active stage but corneal scars cannot be removed. Hence, to eradicate blindness due to trachoma, the patient must be treated before corneal ulcerations and scars have developed.

DIAGNOSIS

1. Cases of recurrent conjunctivitis should be suspected.
2. Drooping lids and narrow palpebral fissure are suggestive.

3. The disease always starts in the upper cul-de-sac, above the upper tarsal cartilage.

4. A Walker or similar lid hook should be used to evert the upper lid and expose the mucosa above the upper tarsal cartilage.

5. A thickened, cobble-stone appearance usually is evident in the tarsal mucosa above the upper tarsal cartilage. This often is made more apparent by the application of 10% fresh argyrol.

6. The absence of the cobble-stone appearance of the inflamed mucosa does not rule out the disease.

7. During the summer season one should be on guard, for the conjunctivitis due to the chlorine in swimming pools may be mistaken for trachoma. In these cases, the inflammation is more general and affects the conjunctiva over the lower tarsal cartilage. The inflammation also is usually more active than the early trachoma cases.

8. In the later stages of the disease, scars will be evident on the epithelial surface of the upper half of the cornea.

9. If a case is discovered, every member of the family should be examined.

10. These cases should be reported, giving name and address and stage of the disease if possible.

The Indiana law requires that all these cases be reported to the local board of health. If active cases are under treatment, they need not be quarantined; if they are not under treatment, the law requires that they be quarantined. I have learned by experience that it is necessary to acquaint the local board of health with their duties as many of them do not seem to know that it is their duty to keep a record of these cases and report them to the Indiana State Board of Health. Local boards of health will readily cooperate when they are advised that it is their duty.

The Committee on Conservation of Vision of the Indiana State Medical Association will be glad to give any assistance possible. Let us render a real service to the unfortunates who have this disease (as well as to the taxpayers!) by eradicating trachoma in Indiana. It can be done! Let's do it!

OPHTHALMIA NEONATORUM

E. E. HOLLAND, M.D.
RICHMOND

Imagine this scene in a hospital or a home. You can construct your own setting.

Mrs. A.: "Doctor, will you be able to cure little Mary's eyes? Will she see all right?"

Dr. X: "I am sorry to tell you, Mrs. A., but Mary will be blind. This dreadful disease has destroyed her sight."

Doctor, you would not envy that physician, no matter what the circumstances were surrounding the case. That is a dreadful statement to make to a parent. You know the utter desolation it brings into the lives of all concerned.

Ophthalmia neonatorum is absolutely preventable. Dr. Carl Siegmund Franz Credé of Berlin announced in 1884 that the instillation of a few drops of fresh one percent solution of silver nitrate in the eyes of the new born infant would prevent gonorrhoeal conjunctivitis. Yet today, after almost sixty years, 15% (fifteen per cent) of the inmates of the Indiana State School for the Blind have a clear history of ophthalmia neonatorum. It is up to our profession to prevent future tragedies of that nature.

The best way to prevent this disease is to instill a few drops of fresh one per cent solution of silver nitrate in the baby's eyes as soon as possible after delivery. Modern obstetrical practice does not attempt to remove the vernex caseosum, but gently opens the infant's eyelids, instills a few drops of silver nitrate solution, direct from a wax ampule which guarantees freshness and proper strength. After a few minutes the eyes are flushed out with warm four per cent boric acid solution or warm normal salt solution. In so doing, great care should be used to avoid touching the eyeball with the dropper tip or any foreign object. An abrasion of the corneal epithelium will always lead to disaster.

If pus appears later in the infant's eyes, a culture and smears should be made. If the gonococcus is present, the baby should be hospitalized and if possible placed in charge of a competent ophthalmologist. The case should never be treated in the home, as the constant and skilled attention of a properly trained nurse is absolutely necessary. The eyes should be frequently flushed with warm normal salt solution or saturated solution of boric acid to keep them clean. This should be done with the utmost care and skill, for the eyelids are hard to open and any undue pressure on them may cause bruising and add to the difficulties. The cornea should not under any circumstances be touched with anything, for the unbroken epithelium is resistant to the infection but, once broken, the ulceration soon destroys the eye. Fresh one per cent silver nitrate solution should be instilled twice a day, two per cent aqueous solution of mercurochrome every four hours, and twenty per cent argyrol solution every four hours, all of which should be washed out by a copious irrigation with warm normal salt solution or saturated boric acid solution, after ten minutes.

Before these antiseptics are instilled, the eye should be flushed with normal salt or boric acid solution, and then flushed again after the drug has been in the eye for ten minutes.

Sulfanilamide in 2 grain doses every four hours for three days has been used with marked success. Foreign protein given intramuscularly to raise the body temperature and raise the anti-body titer may be used with some benefit. These cases of infection should have immediate attention, for once infection is established, the eyelids swell, and the blepharospasm keeps them closed so that the pus and bacterial toxins are retained and the cornea soon breaks down, which spells destruction of the eye and darkness for the poor victim. In such cases, minutes are precious. The time can not be measured in hours or days. A day may mean the difference in sight and blindness.

It is better still to prevent the development of the disease. The public as well as some of our professional brethren must be educated to be on guard for the first sign of pus in the infant's eyes.

Vision is a priceless gift that is not appreciated until it is lost. Let us do our bit to prevent this tragic accident.

PRACTICAL POINTS IN REFRACTION FOR THE GENERAL PRACTITIONER

B. D. RAVDIN, M.D.
EVANSVILLE

During twenty-four years of ophthalmic practice, it has been observed that the general public has an idea that if children of pre-school age present a strabismus, or cross eye, if the school child is referred home because of defective vision or some ocular disease, or an adult observes some symptoms referable to his eyes, very frequently they feel that they must first consult their family physician. If the general practitioner sees many of these cases first, then it becomes the duty of those of us who limit our practice to ophthalmology to acquaint the family physician with the general facts of refraction cases so that he may be able to recognize the true significance of the symptoms and intelligently guide and advise his patients.

In order to determine what is wrong with the patient who presents some defect of vision, the physician must recall a few simple facts about the eye when it is considered as an optical instrument. The eye may be likened unto a living photographic camera, provided with a dark chamber of a definite length but with an adjustable lens system and a diaphragm (the pupil) whose opening varies in size according to the brightness of the light. If the vision is clear at a great distance when the eye is in a state of rest, parallel rays of light are brought to a focus on the retina and this condition is called emmetropia; if the parallel rays come to a focus behind the retina, we call this condition hypermetropia or far-sightedness; if in front of the retina, myopia or near-sightedness. The emmetropic eye may be regarded as a normal eye anatomically; the hypermetropic eye is anatomically too short and the myopic eye is too long. Other ocular factors may produce errors of refraction, but they are the exception to the general rule with one exception, namely, alterations in the curvature of the cornea which give rise to astigmatism.

Patients who suffer from errors of refraction may be conveniently divided into three classes, as follows:

1. Those who see well at a distance, but who have difficulty in seeing near at hand.
2. Those who can see quite easily to read at a close range or to sew, but who can not see well at a distance.
3. Those who have difficulty in seeing both near at hand and in the distance.

HYPERMETROPIA

To develop these three classes a little further, let us discuss number one, "Those who see well in the distance, but have difficulty in seeing near at hand." In this group fall all cases of far-sightedness or hypermetropia. Previously it was mentioned that the eye is provided with an adjustable lens system. This inherent focusing arrangement is called the power of accommodation and is brought into play by the action of a small muscle in the interior of the eye called the ciliary muscle. By its action the eye is enabled to vary its refraction so that vision is distinct at varying distances from a far to a near point. The hyperopic patient with a low degree of error can easily correct his defect by his power of accommodation. This may be maintained for some time until the point is reached when the accommodation is not equal to the long-sustained efforts of reading and near work. This presents a variety of symptoms which vary with the degree of the defect. The normal refraction of the eyes of most new born infants is hypermetropia. The higher the degree of hyperopia the more protection does that child have against the development of the myopia. This will be discussed in more detail later. In very young children, as a rule, the first sign commonly noticed is convergent squint or cross eye. The presence of a convergent squint in a child is always suggestive of hypermetropia. Occasional cases have

been reported that such eyes have become straight as the child grows older and that circumstance has too often been made the excuse for putting off treatment when the strabismus was first noticed. It is said that the patient is too young and that he will outgrow the squint. This is a very grave mistake. Unfortunately many general practitioners are responsible for such advice to parents. The ideal time to correct such cases is when the defect is first noticed. When the hypermetropia is of a high degree, the child or adult may erroneously be said to be short-sighted, because he holds the book close to his eyes which enables him to get a larger retinal image. These young folk frequently have eyes that are red and weak, the lids look irritated, the edges are thickened, the conjunctiva is hyperemic, and the papillae frequently are enlarged. The symptoms, if allowed to go on uncorrected, frequently lead to chronic troubles.

The school child with hyperopia presents definite evidence of eye strain, dull headaches, either temporal, in the brow, or perhaps in the occiput. These are usually worse at the close of the day, are aggravated by reading and by close work and are relieved by sleep. These patients frequently present general symptoms of anorexia, nausea, undue fatigue at the close of the day, extreme irritability and nervousness at times to the point of symptoms simulating chorea; anemia and a generally lowered physical resistance sometimes are present.

As the patient advances in life, eye strain is just as evident as we find it in the child. Adults seem to forget that of all the muscles of the body, the little ciliary muscle is most constantly in use. The hyperopic eye is never at rest. It is working, straining every minute of the waking day, to form a clear picture on the retina of the objects it sees. Certain occupations of adults tax the eyes almost constantly: the work of students, clerks, typists, seamstresses, bookkeepers, engravers, watchmakers, and a host of others. The symptoms they complain of are similar to those of childhood—temple, brow or occipital dull headaches. These are usually accumulative, coming on several hours after using the eyes, and accompanied with blurring and overriding of letters, worse at the close of the day, aggravated by close work, relieved by sleep, and with little or no trouble on Saturdays and Sundays if these are rest days.

It is a common knowledge that sight for near objects fails, with the advance of years. Patients past the age of forty-five frequently discover rather suddenly that they cannot read newspaper print or thread a needle; they are obliged to hold the print or the needle farther away from their eyes or require an intense light to read or sew, and finally their arms are too short! This state of the eyes is called presbyopia. Here far-sighted glasses are a great help to the weakening ciliary muscle whose power of accommodation is rapidly diminishing.

MYOPIA

Number two, "Those who cannot see in the distance, but who can see quite easily to read and sew." In this class we place all short-sighted (near-sighted) myopic cases. Ramsey considered myopia a product of civilization since it was rarely seen in uncivilized people. Prangen in a recent excellent discussion on the myopia problem states, "There seems to have occurred a definite evolution from the older mechanistic theory of myopia (elongated globe) towards the more recent biologic variant point of view." He cites the work of Sourasky in 1928 who regarded myopia as an abnormal tendency to reduce unduly the "hyperopic reserve of childhood." Similar opinions were advanced by Randall and Jackson many years before.

If one looks for causes of myopia, much doubt exists. There is the older mechanistic theory that excess use of the eyes for close work causes myopia. This theory is being discredited generally by many modern ophthalmologists; however, it does appear to be a factor in the production of myopia in very young children only, who use their eyes excessively for close work. This is especially true if the child has a faulty position, poor lighting, and a hereditary tendency to possess weakened ocular tissues.

I am of the opinion that myopia is associated with endocrine disturbances in a certain number of cases. This observation has been made many times, especially in little girls entering the adolescent period. Their myopia has been seen to progress more rapidly at that particular time than at any other.

Wiener, in 1931, concluded that heredity or a congenital predisposition is the chief factor in the production of myopia. This theory seems to be gaining favor with ophthalmologists the world over.

These patients as a rule have few complaints aside from their defective vision. The myopic eye possesses no mechanism to correct its defect as is the case of the hyperopic eyes. There is no natural process to improve its vision. These patients think their vision is as good as others. It is only their inability to see the blackboard at school or the movie that discloses the myopia. Rarely do they complain of headaches or pain. Since vision is poor, near-sighted school children as a rule prefer to read books and remain indoors rather than join their playmates in outdoor activities.

Those with high degrees of myopia present large and prominent eyes with dilated pupils and an inattentive dreamy expression. In order to recognize people on entering a room, they frequently screw up their eye lids and incline their heads forward. Such patients are required at all times to make a conscious effort in order to see clearly.

ASTIGMATISM

Number three, "Those who cannot see distinctly either in the distance or near at hand." This class may be divided into three groups as follows:

(a) Those who suffer from astigmatism.
(b) Those who suffer from a high degree of hypermetropia.

(c) Those who suffer from an insufficiency of convergence.

The correction of the error of refraction in all these cases requires much care, patience and experience.

Astigmatism is a condition of the cornea in which different meridians possess different curvatures with the result that rays of light do not all meet at one focus. We may have far-sighted, near-sighted or mixed (near and far-sighted) astigmatism. In the great majority of cases, astigmatism is congenital. In a few instances it is acquired, developing as a result of corneal incisions for cataract extraction or iridectomy, or by pressure of a tumor in the eye lid.

The symptoms of astigmatism may be few or many, depending on the types, either hyperopic or myopic. In hyperopic astigmatism we may see all or some of the discomforts of eye strain such as headaches, ocular pain, hyperemia of the conjunctiva, epiphora, blepharitis, blurring of vision, and various nervous phenomena. I have repeatedly observed that patients with low errors of hyperopic astigmatism frequently complain of more symptoms than those with a higher error. Most eyes on careful examination will show some degree of astigmatism. To the patient it is the most annoying of all errors of refraction and its correction is of utmost importance.

Lancaster some time ago reported that he had seen a small myopia which was progressing from year to year become arrested immediately after the astigmatism was properly corrected. Years ago Samuel Risley gave memorable expression to this important truth when he said, "The eye passes to myopia through the turnstile of astigmatism."

Diagnosis: It is not the purpose of the author to teach the average general practitioner refraction; however, there are certain definite refractive methods employed by large numbers of American ophthalmologists in the examination of all children and many adults which I would like to call to your attention. In the examination of all these patients, it is of utmost importance to have the knowledge of the static refraction of the patient. This can only successfully be determined by cycloplegia.

The use of atropine drops in all children and some young adults is the cycloplegia of choice of large numbers of American ophthalmologists. One drop of 1% atropine sulphate or atropine oil is dropped in the eyes three times a day for three days. The advantages of a cycloplegia are many. In the majority of cases this produces a complete relaxation of the ciliary muscle and suspension of all accommodative effort. The eye is in a complete state of rest. With a large pupil, retinoscopy of the eye is much easier and a more thorough examination of the fundus is facilitated. The question is often asked, how can a very small child or one of pre-school age, presenting a squinting eye, be successfully examined and proper glasses prescribed? The only successful way is by a complete refraction under a cycloplegic (atropine) together with retinoscopy. The child is asked no questions. The correction can accurately be prescribed from the retinoscopic findings.

Cycloplegic refraction is necessary in many adults to reveal the total latent amount of hypermetropia. Without its use only the manifest error is corrected with the result that frequently the patient continues to have his discomforts because too much of the latent hypermetropia has not been corrected. The value of a cycloplegic refraction in myopic cases is just as important as in hyperopic cases. It serves a double purpose: first, in accurately determining the true amount of myopia and, second, it has a distinct remedial influence over the existing pathological condition of the uveal tract in the myopic eye.

Uncorrected astigmatic errors play an important role in the persistent symptoms of hyperopic or myopic patients. Cycloplegia is needed in many children and adults to determine the full amount and axis of the astigmatism. The difference between comfortable and uncomfortable corrections frequently depends upon the successful correction of the existing astigmatism.

Treatment: Hyperopic eyes are corrected with convex (plus) lenses; myopic eyes are corrected with concave (minus) lenses and astigmatism with plus or minus cylindrical lenses which correct in only one meridian. Cross-eyed (hyperopic) children should be examined as soon as the condition is first recognized. This can successfully be done in children as young as 15 to 18 months. To procrastinate and delay may cause amblyopia and permanent blindness in the squinting eye. Cycloplegic refractions once a year in all squint cases with wearing of full correcting glasses at all times, many times results in a permanent cure of the strabismus. These children should be seen by the ophthalmologist several times a year and the parents advised as to the management of the case, especially when atropine is to be used in the fixing eye, or if orthoptic measures have been recommended for older children. If all other measures fail, surgery on the eye muscles should be performed.

The question often arises, how much of the time shall active boys and girls wear their glasses? Many factors must be taken into consideration in answering this question, such as the amount and nature of the defect, the symptoms complained of, the general health of the child, and the probable relation of the eyestrain to the general condition. Glasses should not interfere with normal outdoor activities of the child; they should certainly be worn constantly in school, and for all near work and at the movies.

The treatment of presbyopia consists in prescribing convex (plus) lenses for reading and near work so as to restore the near point to a convenient and comfortable distance.

The management and treatment of myopic cases presents many interesting phases. The great majority of uncomplicated myopic cases, either children or adults, can be successfully corrected by prescribing the weakest minus (concave) lens that will give the patient the best vision—any existing astigmatism is fully corrected.

Full correcting lenses, worn constantly, I believe is the most important measure in the successful management of all myopic cases except those who have very high degrees of error. Myopic eyes should be examined frequently, several times a year, and their full correction maintained at all times.

In progressive myopia, other factors must be carefully considered aside from the use of full correcting glasses. Proper lighting and posture, care in the amount and time of reading and other near work, adequate outdoor life and activities and the physical state of health of the child are important factors that must be considered in every case. The question of the value of adrenalin drops locally or the use of atropine drops from time to time should be given thought. An investigation of an endocrine instability, the determination of the basal metabolism and blood sugar should be made in all progressive myopes.

In the examination of a child's or adult's eyes, one must never forget that we cannot narrow our views just to an optical apparatus; the eyes are one set of organs of the entire body. To thoroughly understand the workings of a part of the body we must be thoroughly familiar with the whole organism. Here lies the importance and reason why refraction in the majority of cases should be done by a medically trained examiner.

Many of our failures in cases that present themselves for refraction problems are due to the hurry and haste with which these cases are handled—adequate time is very essential to do good refraction. Some one has said years ago, "In a carefully taken history and survey of the patient's general condition will often be found the key to previous failures and valuable indications for special investigation." A case in point: Recently I saw a child who had been having progressive myopia for some time. In the history, I obtained the fact that the child had gained considerable weight in a short period of time. She looked very stocky and plump, resembling a case of hypothyroidism; the family history, developmental history and many of the present findings were diagnostic of thyroid deficiency. The patient had the skin, subcutaneouse padding, clavicular pads and general obesity of hypothyroidism. In order to treat this patient intelligently and successfully, it was most important that her thyroid deficiency be given attention.

From years of experience in refraction, I cannot help but be impressed with the fact that we must individualize our patients—we cannot prescribe glasses by rule of thumb, some patients require frequent observation and change of glasses, while others report every one to two years; each case must involve a study of the individual as well as his eyes.

In closing this paper, I can not do better than quote the ending of a paper on this subject by the late Dr. Duane:

"I think the whole matter of handling refraction cases may be summed up in these two maxims:

"First, let us find out all we can about the eyes we are treating and the symptoms of which they are a part, using to this end every means that experience has proved to be helpful, never doing our work in a hurry and remembering always that this work of all others requires patience, thoroughness, and accuracy.

"Second, let us constantly bear in mind the fact that we are treating patients, not eyes; that we are handling human beings, not machines; that we cannot do our best work unless in each case we put ourselves in touch with the individual man before us, showing sympathy for his troubles, consideration for his infirmities and an understanding mind; to take in all the physical and mental factors which may affect his outlook on life and determine his need for refraction or other correction."

712 HULMAN BUILDING.

ANNUAL POSTGRADUATE COURSE—INDIANA UNIVERSITY SCHOOL OF MEDICINE—MAY 6-11, 1940

Clinics, Lectures from 8:30 a. m. to 5:00 p. m. each day

EVENING MEETINGS AT 8:30 WITH THESE SPEAKERS: ROY D. McCLURE, M.D., SURGEON, DETROIT; F. W. HARTMAN, M.D., PATHOLOGIST, DETROIT; W. D. STROUD, M.D., HEART SPECIALIST, PHILADELPHIA; EDWARD L. COMPERE, M.D., ORTHOPEDIC SURGEON, CHICAGO; BRYNG BRYNGELSON, PH.D., SPECIALIST IN SPEECH DEFECTS; AND PAUL HARRISON, M.D., FAMOUS MEDICAL MISSIONARY FROM ARABIA.

See complete program on page v in this issue

SULFANILAMIDE AND NEOPRONTOSIL*

A RECENT ADVANCE IN OPHTHALMIC THERAPEUTICS

C. W. RUTHERFORD, M.D.
INDIANAPOLIS

The chemotherapeutic agents, sulfanilamide and neoprontosil, also known as prontylin and prontosil, and related azobenzene sulfonamide compounds, are recent additions to our therapeutic resources. When these substances were synthesized, it was not anticipated that they would be used in the treatment of ophthalmic diseases, but clinical experience has already demonstrated them to be of great value in combating several infections of the eye and orbit.

A chemotherapeutic agent aids but does not supplant the normal defense mechanism of the body. Some infective organisms, having gained entrance into the body, elaborate products that have chemical affinities; these products circulate in body fluids and invade body tissues. When a chemotherapeutic compound is introduced, the products of the bacteria react chemically on the molecule of the compound, whereupon some component of the molecule acquires bacterio-static power, or the ability to paralyze the invading organisms. The defense mechanism can function in a normal manner and therapeutic effects materialize, if the compound can be supplied to the body in amounts merely sufficient to keep the bacteria paralyzed.

A few references to the uses and effects of these agents in ophthalmology appeared in medical literature in 1937; since then a goodly number of case reports and discussions have been published. This review is intended to present the ophthalmic and not the general application of this mode of therapy.

CONJUNCTIVA

Glover[1] was amazed at the improvement that was accomplished in twenty-four hours in two patients who had ophthalmia neonatorum due to gonococci; smears were negative in three and four days and cures were effected in fourteen and eight days respectively. Dollfus[2] and associates were pleased with results in gonorrheal conjunctivitis in both newborn and adults; smears were negative in a much shorter time than they had seen with other methods of treatment. Hageman[3] found the smears negative in thirty-six hours.

Willis[4] reported five cases of gonorrheal ophthalmia that yielded quickly to sulfanilamide. Bower and Frank[5] found eighteen of twenty-one patients markedly benefited; their three failures were with two premature and one term baby among six infants treated. Smears were negative in an average of two days as compared with the usual average of twenty days. The average duration of treatment was ten days instead of the usual twenty-seven. Vision was preserved intact unless the cornea was involved. No cornea was perforated. Fernandez and Fernandez[6] stated that in eight adult dispensary patients with unilateral gonococcal infection, results were spectacular and convincing; the disease was checked by the fourth day and had disappeared in from nine to twenty-one days. Walker's[7] case was complicated by a corneal ulcer; the conjunctiva cleared rapidly and the ulcer was healed by the tenth day.

Glover[1] had four cases of acute conjunctivitis that cleared up in from one to seven days, and two of chronic recurring conjunctivitis in which there were more rapid healing and longer periods of freedom from symptoms than after the use of any previous medication. Thygeson[8] treated a woman for inclusion conjunctivitis; improvement was seen on the second day and the eye was normal on the thirteenth. His second patient was a newborn babe; inclusion bodies were absent after the second day, discharge after the fifth, and the conjunctiva was normal within two weeks. This disease requires an average time of six months for healing under usual methods of management. Allen[9] was pleased with the results of sulfanilamide in streptococcal conjunctivitis, but not in the gonorrheal form. Lian[10] observed that non-trachomatous conjunctivitis reacts well.

TRACHOMA

Loe[11] treated 140 adult patients at the Rosebud Indian Hospital. Lacrimation and photophobia disappeared in twenty-four hours. The conjunctival vessels gradually became visible and the conjunctivae were restored to normal in two months. Thirty of the patients had pannus; vision was improved after three days of medication and the

* President's address presented before the Indiana Academy of Ophthalmology and Otolaryngology at the annual meeting in Indianapolis, April 5, 1939.

[1] Glover, L. P. Amer. Jour. Ophth. 22:180, Feb., 1939.

[2] Dollfus, M.-A., Di Matteo and Proux. *Abst.* Arch. Ophth. 21:386, Feb., 1939.

[3] Hageman, P. O. Jour. Pediat. 11:195, Aug., 1937, No. 2.

[4] Willis, T. S. *Abst.* Amer. Jour. Ophth. 21:701, June, 1938.

[5] Bower, A. G. and Frank W. Amer. Jour. Ophth. 22:277, Mar., 1939.

[6] Fernandez, L. J. and Fernandez, R. F., Amer. Jour. Ophth. 21:763, July, 1938.

[7] Walker, C., Jr. Amer. Jour. Ophth. 21:1041, Sept., 1938.

[8] Thygeson, P. Amer. Jour. Ophth. 22:179, Feb., 1939.

[9] Allen, J. H. Personal communication.

[10] Lian, B. *Abst.* Jour. Amer. Med. Assoc. 111:290, July 18, 1938.

[11] Loe, F. Jour. Amer. Med. Assoc. 111:1371, Oct. 8, 1938.

opacities were clearing nicely in from eight to fifteen days. Gradle[12] studied the effects of sulfanilamide in twenty-five out-patients and in sixteen at the Infirmary; the drug was discontinued in five who developed untoward symptoms. Photophobia and lacrimation rapidly disappeared in all cases. Thirty-five of these patients were in Stage II and Stage III; they did surprisingly well, the conjunctival vessels reappeared and the conjunctivae healed without scars. The recovery of vision that had been reduced by pannus was almost miraculous, but where corneal scars, as from ulcers, had impaired sight, there was little or no restoration. Malignant forms were not helped. When improvement was accomplished by this treatment, as much progress was made in three weeks as in three to six months by other methods. Hirschfelder[13] reported in detail on the twenty-five out-patients mentioned by Gradle; the average gain in vision was two lines on the Snellen chart.

Lian[10] observed thirty patients. Conjunctival and corneal complications responded well; pannus, keratitis and ulcers disappeared and rarely recurred. He advises the concurrent use of local measures. Kirk[14] and his colleagues treated twenty-five cases with one failure. The greatest improvement was noted where pannus and keratitis were present. There were no toxic effects. Cases complicated by vernal conjunctivitis were disappointing. Allen[9] noted favorable results in acute stages and partial benefits in late ones; corneal infiltrations cleared rapidly, but patients with extensive or dense scars were not improved in vision.

OCULAR PEMPHIGUS

Caro[15] treated two patients who had dermatologic pemphigus; both were helped, one to a surprising degree. Koch[16] was encouraged with effects in his case of ocular pemphigus. Welsh[17] studied seven patients and found a characteristic streptococcus in their throat cultures; the organism was present in the blood of five of them. If streptococci cause pemphigus, a remedy is now in prospect.

CORNEA

Glover's two cases of ophthalmia neonatorum recovered promptly, although one was complicated by a perforating ulcer; his case of corneal abscess following injury was cured in twelve days; two of his cases of corneal ulcer healed in six and twenty-one days respectively, and a third healed, but with a macula below the pupil. Walker's case of gonococcal ulcer was healed in ten days. Kleefeld[18] treated twenty cases of herpes of the cornea and five of dendritic ulcer with astreptine (Meurice) and white prontosil (Bayer); some patients had relapses, but a majority were cured. Dyar[19] treated a case of creeping pneumococcal ulcer and abscess of the cornea with a sodium salt of sulph-pyridine (sulfapyridine) in five per cent solution four times a day; the eye was healed in ten days.

IRIS

Swigert[20] had two cases of bilateral gonococcal iritis which became worse while sulfanilamide was being given. Glover[1] failed to obtain any benefit from prontosil intravenously for two days in each of two cases of acute iritis, but both yielded to established methods.

EYEBALL

Glover had two male patients, aged 72 and 23, who had panophthalmitis; the older man was out of danger in twenty-four hours, while the younger one, who had infection from colon bacillus, was not benefited. A third patient made a satisfactory recovery.

ORBIT

Goldenburg[21] reported a case of orbital cellulitis of metastatic origin; staphylococcus albus was identified. There was evidence of a cavernous sinus thrombosis limited to one side, and *the patient made a complete recovery*, a point that is worth remembering. Swigert's patient with orbital cellulitis recovered promptly. Glover treated orbital abscesses in a girl of eight years and a boy of four; the girl was symptom free in three days and the boy in four. His third patient, an infant of five months, was not benefited; a gram negative diplococcus was isolated.

Dollfus[2] and associates reported favorable results in patients with bilateral dacryoadenitis.

PROPHYLACTIC IMMUNIZATION

Hoare[22] found sulfanilamide and sulfapyridine effective in prophylactic immunization against the streptococcus hemolyticus in several situations. Similar employment of these or related compounds in connection with cases of accidental trauma to and surgery of the eye and orbit should be investigated.

INDICATIONS AND ADMINISTRATION

Ophthalmia neonatorum. Glover prescribed one grain of prontylin (sulfanilamide) in milk three times a day, saline irrigations of the eyes followed by instillations of prontosil every half hour,

[12] Gradle, H. S. Discussion on Loe's report.

[13] Hirschfelder, M. Amer. Jour. Ophth. 22:299, Mar., 1939.

[14] Kirk, R., McKelvie, A. R. and Hussein, H. A. Lancet, Oct. 29, 1938, p. 994.

[15] Caro, M. R. Arch. Dermat. and Syph. 37:196, Feb., 1938.

[16] Koch, F. L. P. Amer. Jour. Ophth. 22:300, Mar., 1939.

[17] Welsh, A. L. Arch. Dermat. and Syph. 30:611, Nov., 1934.

[18] Kleefeld, G. *Abst.* Amer. Jour. Ophth. 22:220, Feb., 1939.

[19] Dyar, E. W., Jr. Personal communication.
Editorial. Amer. Jour. Ophth. 22:315, Mar., 1939.

[20] Swigert, J. L. Discussion on Walker's case report.

[21] Goldenburg, M. Amer. Jour. Ophth. 21:54, Jan., 1938.

[21] Goldenburg, M. Amer. Jour. Ophth. 21:54, Jan., 1938.

[22] Hoare, E. D. Lancet, Jan. 14, 1939, p. 76.

and cold compresses to the eyes each alternate half hour.

Gonorrheal ophthalmia or gonococcal conjunctivitis. Fernandez and Fernandez ordered ten grains of sulfanilamide four times a day for three days and then three times a day. One patient received fifteen grains four times a day. They used local medication also. Bower and Frank[5] used three-fourths grain per pound of body weight per day and gave one-sixth of the amount every four hours; when smears became negative the dosage was gradually reduced.

Conjunctivitis. In his cases of acute and chronic conjunctivitis, Glover ordered saline irrigations followed by instillations of prontosil every one or two hours. Thygeson gave his adult patient ten grains of sulfanilamide three times a day.

Trachoma. Loe gave nothing but sulfanilamide and sodium bicarbonate in equal amounts internally. The daily amount was computed at one-third grain of each drug per pound of body weight; one-third of the amount was given three times a day. After ten days the daily amount of each drug was fixed at one-fourth grain per pound, one-third of the amount was given three times a day and treatment was continued for one month. Meyer[23] stated that surprising benefits without troublesome complications followed the administration of ten grains each of sulfanilamide and sodium bicarbonate three times a day for one week and twice daily thereafter. This plan is being used on trachoma patients at the Indiana University Medical Center out-patient department with encouraging results.

Cornea. Glover ordered prontosil intravenously and by instillation in his cases of ulcer, while in his patient, a boy of five years, with abscess from injury, prontosil was instilled every hour, two grains of prontylin were given orally three times a day and typhoid vaccine intravenously every second day. Kleefeld concluded that sulfanilamide derivatives are useful in virus diseases and that they can cure corneal herpes, superficial punctate keratitis and dendritic ulcer.

Orbital abscess. Glover reported success with 2.0 cc. of prontosil intravenously three times a day and dressings of magnesium sulfate solution.

Panophthalmitis. Glover gave 5.0 cc. of prontosil intravenously three times a day and instillations of the same solution every half hour.

MODE OF ACTION AND DOSAGE

Neoprontosil is claimed to be a specific against hemolytic streptococcal infections. It does not act as a foreign protein and so does not stimulate leukocytosis or phagocytosis by direct action; it does not attack organisms directly and therefore is not credited with bacteriocidal powers. It may have indirect bacteriostatic effects, but this property is likely the result of a chemotherapeutic cycle of physicochemical reaction. Sulfanilamide and neoprontosil are chemical compounds. The hemolytic streptococcus acts on the compound chemically, and then some activated component of the compound inhibits the hemolysing proclivities of the organism. The blood is partially sterilized, the tissue fluids become unfavorable media for the active multiplication of susceptible bacteria, invasion of tissue does not occur, production of toxic substances is diminished or stopped, and the antibacterial mechanism can function effectually; then there is marked leukocytosis and phagocytosis.[24]

In order to accomplish this purpose it is necessary to build up an effectual concentration of the drug in the body fluids by giving higher dosage during the early days of treatment, and then maintain a constant adequate concentration by suitable quantities of the agent for the remaining duration of medication. Carey[25] believed that from 4.0 to 7.0 mg. per cent of sulfanilamide would be protective; Bower and Frank said it should be above 5.0 mg. per cent in the blood.

Sulfanilamide and neoprontosil are excreted in the urine, the latter the more rapidly according to some research conclusions. The younger the patient the more rapid is the rate of excretion, consequently young persons require heavier proportionate dosage to attain and maintain an effective concentration level in the body fluids; infants are found to tolerate one-third to one-half and children one-half to three-fourths of the adult dosage, rated on body weight. The same considerations explain the need for cautious administration to persons whose excretory efficiency is impaired.

The maximum safe dosage of sulfanilamide for an adult of 120 pounds or more who has a severe infection and no contraindication, such as anemia, is probably about 15 grains by mouth every four hours for two days, and then from 7½ to 10 grains every four hours. The initial daily amount for persons weighing less than 120 pounds is three-fourths grain per pound of body weight, divided into from four to six doses. Sulfanilamide may be given subcutaneously in 0.8 per cent of crystals in warm physiological sodium chlorid solution every six to eight hours. Bower and Frank used a one per cent solution and gave 2.5 cc. per pound of body weight every twelve hours. In less severe and mild infections the quantities are to be reduced.

Neoprontosil is given orally in from 5 to 15 grain doses every four to six hours, according to the weight of the patient and the severity of the infection. Some observers claim that it is more effective and safer by mouth than by intramuscular administration, but in cases of gastric intolerance it can be given intramuscularly in 2.5 per cent solution every four hours, 10.0 cc. to older and 5.0 cc. to younger persons. For subcutaneous use in adults of 120 pounds or more,

[23] Meyer, S. J. Personal communication.

[24] New and Non-official Remedies. Jour. Amer. Med.

[25] Carey, E. W., Jr. Jour. Pediat. 11:202, Aug., 1937,

the daily quantity is 1.0 cc., and in children 1.5 cc., of 2.5 per cent solution per pound, divided into six doses. It has been given intraspinally.

Sulfanilamide and neoprontosil appear to have about the same effects in general. It has been claimed that the latter is better tolerated by most patients; it acts more slowly, its toxicity is comparatively low and there are fewer untoward effects with it. Some reporters believe that neoprontosil acts by liberating sulfanilamide in the process of chemical reduction in the body, while admitting that the quantity of sulfanilamide thus set free is much too small to be effective. Others contend that neoprontosil inhibits the hemolysing effects of the hemolytic streptococcus by its own properties and not because of the sulfanilamide that is liberated when neoprontosil is reduced chemotherapeutically. Until more is known about them, they should not be given internally at the same time, although sulfanilamide internally and neoprontosil by instillation are compatible in some ophthalmic diseases.

Considerable study is being made of a related drug, sulfapyridine, for the treatment of infections due to various organisms, including pneumococci of several types, but the time has not arrived for discussing its clinical application to ophthalmic problems.[26] Dyar is the only one, as far as I know, who has used this compound in the eye.

UNTOWARD EFFECTS

Undesirable reactions may be attributed to (1) individual sensitivity, idiosyncrasy or intolerance to the drug or failure to properly excrete it, (2) to the disease under treatment or some complication present with it, or (3) to incompatible drugs, as sulfates, given concurrently. The ill effects so far noticed are lassitude, fatigue, malaise, headache, vertigo, tinnitus, acidosis, anorexia, nausea, cyanosis, dermatitis, fever, diarrhea or desire to defecate, and reactions incident to blood changes. When any of these are severe and do not disappear promptly, the dosage may be reduced or the drug withdrawn for from one to three days.

Whenever any evidence of toxicity appears, the fluid intake should be increased to the patient's tolerance. Acidosis is met or forestalled by giving sodium bicarbonate internally. Cyanosis is rarely serious; it cleared up in Goldenburg's patient while the dosage of sulfanilamide was being increased. Of Loe's 140 patients, three had dermatitis and four others had mild vertigo and headache; the symptoms were promptly relieved by intermissions in treatment. Gradle's infirmary patients showed a rather uniform decrease of from 10 to 15 per cent in hemoglobin and a reduction of from 1,000 to 3,000 white blood cells, but no change in red cells.

A pink or red discoloration of urine or feces is due to the dye constituent of the drug and not to blood.

[26] (See Jour. Amer. Med. Assoc. for Feb. 11, Mar. 18 and 25, 1939.)

Bucy[27] reported an incident of toxic optic neuritis arising in a sixteen year old girl who had osteomyelitis of the ilium and multiple abscesses. Streptococcus viridans was positive in blood culture. Sulfanilamide was tried three times; after each time she had sensations of choking, headache, cyanosis or diarrhea. The third attempt was followed by severe loss of central vision, but it was rapidly recovered after withdrawing the drug. She had been taking ferrous sulfate (feosol) for a long time, and this may be an instance of incompatible therapy.

CAUTIONS AND CONTRAINDICATIONS

Complications should be watched for in the presence of renal insufficiency, damaged heart, rheumatic fever, rheumatoid arthritis, pregnancy and lactation where unborn and nursing children as well as mothers might be affected, low basal metabolic rate, and severe diseases of the blood.

Dangerous complications are jaundice, hemolytic anemia and agranulocytosis (granulocytopenia). Deaths have been reported, but in such instances the gravity of the disease being treated must be evaluated. The concentration level of the drug in the blood should not exceed 7.0 mg. per cent.

Sulfanilamide and neoprontosil are contraindicated where the red blood cells are greatly reduced in number, as in anemia, or in combination with any other therapy, as roentgen radiation, which might tend to decrease the number of red blood cells. Sulfhemoglobinemia has developed in patients who were taking sulfanilamide and magnesium sulfate internally at the same time.

SUMMARY

Sulfanilamide and neoprontosil have demonstrated value in a number of ophthalmic diseases. The most pronounced effects have appeared in patients where staphylococci, streptococci and gonococci have been identified; in herpes of the cornea, superficial punctate keratitis and dendritic ulcer; in inclusion conjunctivitis and in trachoma. Iritis has not yet responded.

Some patients, who proved to be sensitive to the drugs, developed untoward reactions, but these speedily disappeared upon reduction of dosage or temporary withdrawal of the medicines.

Time and experience will be required to determine the precise indications and dosage for sulfanilamide, and neoprontosil and related compounds, their dependability in action and the permanence of their effects.

[27] Bucy, P. C. Jour. Amer. Med. Assoc. 109:1007, Sept. 25, 1937.

MEMBERS: COMPLETE THE FORM ON PAGE 268 FOR THE M-DAY COMMITTEE

MATERNAL WELFARE*

FRANK W. PEYTON, M.D.
LAFAYETTE

During the past decade public attention has been drawn to the high maternal mortality in this country. Many allegedly contributory factors have been advanced and we, as the practitioners of medicine, have accepted our part of the blame and have entered into the widespread drive toward improvement. By improvement I mean the regulation of our hospitals, the training of our medical students and nurses, the education of the laity, and the cooperation with the Maternal and Child Welfare Department of the Government. While criticism in lay and professional journals has been descending upon us, forces have been at work which are making the criticism less and less justified. In 1929 the United States stood third from the bottom among the nations reporting to the International Health Office.[1] Our death rate of 7.0 per thousand livebirths compared unfavorably with Norway's rate of 3.0 per thousand livebirths. By 1937, the total figures had been reduced from 22,000 to 10,769.[2]

The maternal health problem of the United States is especially unique and differs from that of any other nation. We are a heterogeneous race. Intermarriage between variant physiques results in obstetrical difficulties. Our large Negro population admittedly does not get proper care. Operative interference has been popular and thereby too prevalent. The demand for comfort on the part of the patient, coupled with the physician's inexperience, leads to the abuse of pain-relieving drugs. The widespread practice of criminal abortion is an obvious maternal hazard. We are attacking this unique maternal problem by the following measures: more scientific obstetrics, the availability of care by governmental and private organizations to the needy, the condemning of harmful drugs, and the education of the public in regard to abortion. These measures are far from perfect, and we still have room for improvement.

Turning to the components of maternal mortality, one finds three major causes of death. They are infection, toxemia, and hemorrhage. These are largely controllable and are important factors to be considered in attacking maternal loss.

INFECTION

Infection is responsible for 40% of all maternal deaths. We cannot disregard the fundamental principles of cleanliness, asepsis, and antisepsis. Each must be applied. Specific and detailed instructions as to proper hygiene must be given each expectant mother. The skillful and appropriate conduct of labor, delivery, and the postpartum must be carried out. Frequent rectal and improper vaginal examinations are condemned. Operative interference must be rightly performed and used only where a satisfactory indication for its use exists. The value of antisepsis still has a place along with asepsis. Brown[3] of St. Louis reports the routine vaginal instillation of 1% neutral acriflavine in glycerine (8 cc. every four hours during labor) in 11,000 deliveries with no deaths from infection. This report cannot be dismissed lightly. When infection has developed, frequent small blood transfusions are recommended. Sulfanilamide has proven to be of unquestioned aid in treating puerperal infection,[4] but it is to be remembered, as Williams[5] of Liverpool says, "The indiscriminate use of sulfanilamide may do more harm than good, especially if it leads to a neglect of proper technique and increased interference."

TOXEMIA

Toxemia is responsible for 26% of the deaths. The successful management of toxemia depends upon the prompt recognition of and the rational application of a sound type of therapy. Recent work[6] has brought to light the role that body fluids play in maintaining health. From this conception a logical form of treatment has been derived. It must be assumed that toxemia develops only when there is renal impairment. This impairment may be so slight that none of our renal tests is of value. When the woman with renal impairment becomes pregnant there is a retention of urinary wastes and electrolytes due to the added burden of fetal excretion.

The fetus and its ultimate maturity is our goal in obstetrics, and we cannot withdraw its harmful excretory products unless viability is unquestioned. We must, therefore, assail the harmful retention of electrolytes. It has been well proven[6] that impaired kidneys can be made to excrete the normal amount of urinary solids if large enough amounts of fluid are ingested. Therefore, the basic principle in treatment should be the forcing of fluids. The sodium salts have been found[7] to be the harmfully retained electrolyte. So toxemia could be viewed as a sodium poisoning, and sodium, therefore, should be eliminated. This limitation of

* Presented before the Carroll County Medical Society, December 12, 1939.

[1] Folsom, Clair E.: Maternal Mortality Survey of Flint, Michigan, United States Department of Labor, Children's Bureau, October 16, 1938.

[2] Runnels, Scott C.: *J.A.M.A.*, **113**:402-408, July 29, 1939.

[3] Brown, T. K.: Section on Infection: Am. Congress of Ob. & Gyn., September, 1939.

[4] Colebrook, L., and Purdie, A. W.: *The Lancet* **2**: 1291-1293, 1937.

[5] Williams, B.: *The Lancet:* 343, August 7, 1937.

[6] McPhail, F. L., The Toxemias of Pregnancy, *J.A.M.A.*, **111**:1804-1807, November 19, 1938.

[7] De Snoo, K.: *Amer. J. Obs. and Gyn.*, **34**:911-934, December, 1937.

sodium is carried out by the withdrawal of salt (NaCl) from the diet, and forbidding the patient to use soda bicarbonate and all popular alkalizers and anti-acids containing sodium. Placing the patient on a neutral ash diet is wise. The increase of fluids orally or parenterally (5% glucose in distilled water) in order to produce at least a 2500 cc. daily urinary output, plus the elimination of sodium, will free most toxemic patients of symptoms and pathological findings. If convulsions are present, they can be controlled by initial doses of sedatives while intravenous treatment is instituted. The occasional case failing to respond may require termination of pregnancy. Any scheme of therapy including dehydration[8] with the limiting of proteins is not advisable.

HEMORRHAGE

Loss of blood from placenta previa, premature separation of the placenta, or in the puerperal state is responsible for 11% of the deaths. The plan of management of any bleeding during the last trimester of pregnancy should be as Huber[9] states:

1. Immediate hospitalization.
2. Preparation for transfusion.
3. Sterile vaginal examination to determine the presence and degree of placenta previa and the condition of the cervix.
4. Control of the bleeding by such procedures as (a) rupture of the membranes, (b) insertion of an intra-ovular bag, (c) Braxton Hick's version, or (d) Willett's forceps, depending upon such circumstances as the viability of the fetus, condition of the cervix, extent of placenta previa, and parity and condition of the patient.
5. Replacement of blood loss.
6. Delivery. In a favorable environment, the safest procedure for both mother and infant may be immediate cesarean section, particularly in the nulliparous patient with a firm, closed cervix and in the presence of a total placenta previa.

Lacerations and atony of the uterus are the two main causes of postpartum hemorrhage. To use an old adage,[10] the time to stop a postpartum hemorrhage is before it has started. The maintenance of fluids during the first stage of labor is essential. Prolonged labor and deep anesthesia are conducive to bleeding. A mismanagement of the third stage of labor by hasty attempts to expel the placenta results in hemorrhage. The immediate intravenous injection of ergotrate will contract most atonic uteri and stop bleeding. Early uterine packing is advised; but, just before packing, examine the cervix and lower portion of the uterus for tears. Lacerations must be sutured. Though the patient should receive glucose intravenously, a blood transfusion is preferable.

Prenatal supervision is potentially a tremendous factor in the prevention of obstetric catastrophies. Many women who die in childbirth have not received antepartum care; or, if they have, it has been woefully inadequate.[11] The full possibilities of adequate prenatal care have not yet been realized since its application is still by no means universal. Experience in individual practice and in clinics has shown its value. The outline, "Standards of Prenatal Care,"[12] is recommended for the use of physicians not already fully acquainted with what comprises adequate care.

SUMMARY

1. The criticism of our high maternal mortality is less justified than 20 years previously.

2. The unique maternal problem of the United States is stated together with what is done to combat it.

3. Infection is discussed as a cause of maternal death.

4. A conception of toxemia is presented along with a logical form of treatment.

5. Antepartum and postpartum bleeding are outlined in regard to management.

6. The value of prenatal care is stressed.

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[8] Arnold, J. O.: *J.Ind.S.M.A.*, **30**:617-621, Dec., 1937.
[9] Huber, Carl P.: *J.Ind.S.M.A.*, **32**:249-254, May, 1939.
[10] Dorsett, E. L.: *J.Mo.M.A.*, **36**: 99-102, March, 1939.
[11] Plass, E. D.: *J.Ind.S.M.A.*, **31**:673-678, December, 1938.
[12] Standards of Prenatal Care, United States Department of Labor, Children Bureau, Publication No. 153, 1934.

ABSTRACT

SULFANILAMIDE SHOULD BE ADMINISTERED WITH CAUTION DURING PREGNANCY

It is concluded from studies made at Johns Hopkins Hospital that until the effects of sulfanilamide on the human fetus or unborn child are better known the drug should be administered with extreme caution during pregnancy, *The Journal of the American Medical Association* for March 30 warns.

"The necessary observations in human beings should include a careful study of intra-uterine (inside the womb) development, birth weight and postnatal (following birth) growth in the infants born to mothers receiving extended sulfanilamide treatment during pregnancy," *The Journal* says.

"Using rats in carefully controlled experiments, Harold Speert has recently reported observations on the placental transmission (from the mother to the unborn child) of sulfanilamide. He found that administration of this drug to rats throughout gestation (pregnancy) results in the appearance of sulfanilamide in approximately equal concentrations in the blood streams of both mother and fetus. Prolonged administration of sulfanilamide to pregnant rats produces deleterious effects in the offspring, including increased intra-uterine and postnatal (after birth) mortality, decreased litter size, diminished birth weight and selective stunting of growth."

Medicine Today

"Be not the first by whom the new are tried, nor yet the last to lay the old aside."

E. L. VAN BUSKIRK, M.D.

Lafayette

The Distribution of Sulfanilamide in the Eye. From the results in experimental animals, it seems that the ocular tissues are rapidly penetrated by the drug, traces of which are found throughout the eye 15 minutes after oral administration. The rapidity of penetration depends upon the relative vascularity of the tissue; for instance, the concentrations of sulfanilamide in the various ocular tissues occur in the following order: chorio-retinal tissues, corneoscleral tissues, aqueous, lens and vitreous. The maximum concentrations were reached in the corneosclera at the end of four hours; in the blood, aqueous and vitreous at the sixth hour; and the lens, choroid and retina at the twelfth hour. The most rapid rise of tissue concentration was between the second and third hours after injection, with the exception of the lens, in which this occurred between the fourth and sixth hours. The fall in concentration was the most precipitous in those tissues which contained a relatively considerable amount of the drug, but the lens in which there was a low distribution retained at the end of 48 hours more than three times the amount of sulfanilamide that was retained in each of the other ocular tissues. Paracentesis of the anterior chamber followed half an hour lated by another paracentesis also leads to an increased concentration of sulfanilamide in the aqueous. Sulfanilamide dusted onto the conjunctiva and cornea leads to some irritation without any appreciable penetration of the drug into the ocular tissues. After subconjunctival injection of a solution of the drug the aqueous concentration was far below that which followed oral administration.

—Bellows & Chinn: *Brit. J. Ophth.* 784-785, Dec., 1939.

Some Observations on the Use of Sulfanilamide in Trachoma and Associated Ocular Conditions. Recovery from the associated eye conditions in chronic trachoma, such as bulbar conjunctivitis, phlyctenular conjunctivitis and corneal ulcers, was rapid following the use of sulfanilamide. The symptoms, such as photophobia, lacrimation, hyperemia and edema of the lids, all subsided rapidly. The granulations of the palpebral conjunctivae and pannus, although improved, were always present at the time of discharge. The author concludes that sulfanilamide had been specific for the secondary infection, but in none of these cases was there any evidence that the underlying trachoma was cured or even greatly improved. Seventeen children between the ages of 8 and 14 years, with chronic trachoma and little or no bulbar or corneal involvement other than slight pannus, were treated with sulfanilamide for periods of 7 to 24 days. Only one clinical cure was obtained. The other 16 showed slight to moderate improvement.

—Spining, W. D.: *Amer. J. Ophth.* 23:271-274, 1940.

Is Myopia a Deficiency Disease? Myopia has always been considered an hereditary characteristic. By reason of the author's recent study, he is convinced that heredity plays but a minor role in the cause of myopia. A large proportion of his myopic patients had apparently discarded fats and other essential foods from their diets. At least 8 percent of fat in the diet is essential for health and growth because of the vitamin A these fats contain and also as a solvent for carotenes. Clinical and experimental evidences are produced to show that myopia is found where such food elements are lacking in the diet.

—Miller, Hugh: *Amer. J. Ophth.* 23:296-305, 1940.

Medical Treatment of Senile Cataract. In the future more patients with senile cataract will come to the ophthalmologist for treatment. Because of the reduction of infant mortality and the lengthening span of life for those who survive the hazards of infancy, the trend of population in the industrially advanced countries is toward old age. Along with this general senescence in the population belongs an increased incidence of senile cataract. The modern treatment of senile cataract is surgical. Operation for cataract in many respects is a radical treatment after the disease has occurred. It is a removal of a part of the eye for which there is no restoration of function without a troublesome artificial substitute. If ophthalmology constantly advances, the treatment will tend to be, first, preventive; second, medical, and as a last resort, surgical. Whether or not these objectives will be reached will depend on research and an enthusiastic scientific frame of mind and not on negativism.

The biochemistry of the senescent lens has been little studied. Salit is probably the only one who has worked persistently on this problem. Others have been more interested in experimental cataract in young animals, which in most cases is not concerned with senile cataract. A criticism cannot be made on chemical research of the aging lens which is hardly started and which will lag in progress until more is known about senescence, heredity and biochemistry. Such associated fields of research are always interdependent. In the study of senile cataract the application of chemistry and physics is needed to get beyond normal and pathologic anatomy. Physiologic and pathologic senes-

cence are to be differentiated. The effect of infection, intoxication and trauma should be determined, for many senile cataracts may be classified as complicated cataracts. Senescence of the lens may aiso be a senescence of tissue, which may or may not be a part of the general senescence of the body. The question arises whether or not senile cataract is a primary result of senescence or the secondary response to alterations in the body fluids which have not maintained a proper equilibrium in the aging of the person.

—KRAUSE, ARLINGTON C.: *Arch. Ophth.* 23:487-490, 1940.

CASE REPORT: SEVERE TRAUMATIC INJURY IN A DIABETIC

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GEORGE A. COLLETT, M.D.
WEMPLE DODDS, M.D.
Crawfordsville

The patient, a white male, age 39, was brought to Culver Hospital by ambulance on September 14, 1939. He had been changing a tire along the roadway when he was struck by a passing truck. On admission, he was in severe shock, with numerous bruises and contusions, and he had a compound fracture of the right leg. The tibia and fibula were badly fragmented and a fragment of the tibia, approximately three inches in length, was missing. The lacerated wounds of the right leg were soiled with road dirt, and a thorough debridement was done under general anesthesia. The wound was cleaned with soap and water, hydrogen peroxide, and merthiolate. A Steinmann pin was placed through the os calcis and twelve pounds of traction applied to maintain proper extension (Fig. I). The wound was closed with interrupted silkworm sutures. Prophylactic injections of antitoxin for tetanus and gas gangrene were given.

Figure I



Past History: Previous to the onset of his diabetes in the fall of 1922, the patient had always been in good health. The onset was apparently quite sudden and he states that he was seized with a sudden intense thirst while attending a theatre in Indianapolis. In August, 1922, he entered the Methodist Hospital at Indianapolis where he remained six weeks. He was placed on a weighed diet and given a daily insulin dosage of 35 units. For approximately three months, he remained under supervised control; but he gradually withdrew from medical supervision, and for more than seventeen years he had managed to regulate his diet and insulin in a most haphazard manner. Except for a few days in February, 1937, when he was hospitalized because of moderately severe acidosis, his urine has not been examined more than six times since 1922. During this long period he consumed large quantities of alcohol and has been known to consume three pints of "alcohol" in a twenty-four hour period. Nevertheless, he managed his diabetes himself, increasing or decreasing his dosage in accordance with the way he felt, and taking sugar when he felt that his dose of insulin was excessive. He stated that for a number of years his average daily dose had varied between 60 and 70 units.

The patient acquired syphilis in 1928. He was given weekly intravenous injections of 0.6 gm. neoarsphenamine for two years. Treatment was discontinued because of development of arsenical dermatitis. Since then he has received occasional injections of bismuth.

Hospital Course: Following the preliminary emergency treatment, the blood sugar was 470 gms. per 100 cc. of blood, and the urine contained 2% of sugar and a large amount of diacetic acid. The Kline test gave a 2 plus reaction and the Mazzini test a 3 plus reaction. On the second hospital day, the patient complained of severe pain in the right leg and there was marked swelling with suggestive crepitus of the soft tissues. A bed-side film was suggestive of small bubbles of gas in the tissues. The temperature ranged from 101° to 102.4°. De-



Fig. II

spite the fact that gas bacillus anti-toxin had been given, two roentgen treatments of approximately 40 roentgens each were administered to the leg. Pain and swelling promptly subsided. Large doses of insulin were required during the first few days to control the glycosuria. On the seventeenth hospital day he was placed on protamine zinc insulin which he has continued to take until the present time. On October 16, 1939, the wound was clean and a cast was applied. On December 2, 1939, roentgen examination showed the fibular fragments united but no evidence of bridging of the tibial fragments. A sliding bone graft was performed on December 4, 1939, a sliding graft from the upper fragment being pulled down across the defect and impacted in the lower fragment. No fixation was used except for snug closure of the fascia and subcutaneous tissues. A cast was again applied. On March 19, 1940, the wound was clean and clinically there was firm union (Fig. II). A cast incorporating a walking caliper was applied from the toe to the knee. Weight-bearing is not, of course, to be permitted for several months.

Discussion: This case is presented to illustrate a satisfactory result following a very serious injury with loss of bone substance in a patient whose diabetes has never been under satisfactory control. A strip of periosteum joining the two major tibial fragments was observed to produce small areas of ossification, but this was not sufficient to bridge the large gap, and a sliding bone graft was necessary to facilitate healing. No evidence of active syphilis was observed clinically.

It is interesting that healing has occurred in the presence of two diseases, diabetes and syphilis, which are known to delay or prevent bone repair.

ABSTRACT

HEART DISEASE AMONG YOUNG PEOPLE REMAINS A SERIOUS PROBLEM

While a recent report of a decrease in mortality due to heart disease among young people is encouraging, one should remain fully aware of the seriousness of the problem, *The Journal of the American Medical Association* for April 6 declares in an editorial. "Rheumatic heart disease," the editorial says, "which for example caused more deaths among persons under 20 years of age in Philadelphia during 1936 than whooping cough, measles, diphtheria, scarlet fever, meningococcic meningitis and anterior poliomyelitis (infantile paralysis) combined during this age period, continues to be particularly worthy of attention.

"The report by O. F. Hedley, M.D., Philadelphia, on the mortality from heart disease among young persons in the United States merits attention, because it would seem to confirm occasional reports in the literature of a downward trend in the mortality from heart disease among young people. The report is based on information abstracted from the official mortality statistics of the U. S. Bureau of the Census, and the data cover the death rates from heart disease among persons from 5 to 24 years of age. A study of the data reveals that in every section of the country and in every state in which statistics were obtained there was a decline in the mean annual death rate from heart disease in 1930-1936 as compared with 1922-1929. The decline was often considerable. Thus, in Massachusetts the decrease amounted to about 36 per cent, while in several states the decline was over 30 per cent. The data collected from thirty-six states and the District of Columbia show that in this territory the mean annual death rate per hundred thousand from heart disease for the age period studied was 14.9 during 1930-1936 as compared with 19.7 per hundred thousand during 1922-1929, a decline of 24.4 per cent. Owing to possible inaccuracies in estimations of population, the decline indicated may not actually be as great as it appears to be at present. In any event there was apparently a rather substantial actual decline in mortality from heart disease among persons from 5 to 24 years of age during the period covered in the report of Hedley.

"Since at least 80 per cent of heart disease during this age period is of rheumatic origin, it is pointed out by Hedley that the data might also serve as an index of mortality from rheumatic heart disease. It then becomes evident that, although the ultimate cause of rheumatic heart disease is unknown, there has apparently been a reduction in mortality. It is not known, however, what particular factor may be responsible for this decline. There are a number of possibilities. Some factor in the changing diet of the American people may be responsible, or perhaps rheumatic fever is becoming milder. The possibility that the diagnosis and treatment of rheumatic fever may have improved to the extent that fewer cases of severe heart disease are developing and the fact that, in general, more careful attention is being given to general health problems of children are also factors which should be considered. Even the possibility that improved housing conditions might be responsible for this decline should not be overlooked. Certainly, attempts should be made to determine the reason for the apparent decline in mortality in heart disease among young persons, and every effort should be made to give further impetus to the decline."

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MAY, 1940

Editorials

MAN'S PRICELESS HERITAGE

"In the beginning God created the heaven and the earth. And the earth was without form, and void; and darkness was upon the face of the deep. And the Spirit of God moved upon the face of the waters. And God said, Let there be light; and there was light." Light! the element necessary that newly-created man might utilize the greatest of his many God-given boons, VISION! And since that time, down through the ages, man has recorded his feelings regarding this wonderful thing we commonly call "sight."

Whether it be graven upon stones as men were wont to do thousands of years ago, whether it be inscribed upon the papyrus as the Egyptians recorded their thought, or whether it be the pennings of the more modern ages, vision is generally regarded as man's priceless heritage. Yet one often wonders why mankind chose to go along for so many centuries without seriously considering how vision might be conserved.

The industrial record might be cited to indicate the general apathy exhibited by civilization toward what is now known as conservation of vision. It is a matter of record that but twenty-six years ago *The Journal of the Indiana State Medical Association* published what generally was credited as being the first paper to be published on the subject of occupational injuries of the eye. Since that date this topic has become one quite commonly discussed. In that paper attention was directed to the measures being taken in a few of our larger industrial organizations to reduce the number of eye injuries. It presented the pioneer work of Mr. W. H. Cameron, then connected with a group of steel foundries and who later became the active head of the National Safety Council. It might well be recalled that this same man had much to do with the first of the modern safety goggles, he having worked in connection with the head of a New York optical manufacturing company in designing what is now known as the Saniglass type of goggle.

Industry had much to do with interesting the medical profession in conservation of vision; first, the "company doctor" was enrolled in the campaign, then eye physicians by the score enlisted; later the whole profession was interested, as was the lay press. Today, conservation of vision is a term thoroughly understood by all who can read.

Practically every state and national medical society in our land has a special committee on conservation of vision and it is to our credit that these committees are active—they produce results. These results, however, were not to be had merely for the asking; it required prolonged study of the various problems, it required much "preachment" ere the work was concluded. We might refer to the long fight made by our own State Association before we were successful in having enacted the ophthalmia neonatorum law, a measure that has saved the vision for hundreds of new born.

Only recently has our Indiana General Assembly recognized the dire results accruing from prenatal syphilis which accounts for hundreds of cases of poor vision and some cases of total blindness. The law covering this condition became effective in March of this year; hence, it will be some time before its beneficial effects are noted, yet we of the medical profession well know what these results will be.

Industrial medicine, that wide field in which our State Board of Health is doing such a high class job of pioneering, will open the way to countless new plans for conserving vision for Hoosier residents.

The Association committee on conservation of vision has become one of our most active groups and has the undivided support of the Indiana Academy of Ophthalmology and Otolaryngology. It is the members of this group who are responsible for this issue of THE JOURNAL and we hereby recognize their valuable aid in making this number of our magazine worth while.

There remains much to be done; there is dire need for more publicity for the important subject of conservation. This publicity must come from physicians who really are interested in the subject rather than from some crack-brained theorists; nor should we permit the commercialization of the project, such as is being attempted in places. If we are to sell this idea in its entirety, we must be sincere salesmen, salesmen not for profit!

The improvement of vision—yes, the conservation of vision—by means of refraction should not be overlooked. Indiana has too many refractionists who are but "spectacle peddlers"! This term applies to some medical men as well as to some optometrists. In an editorial printed in the Octo-

ber, 1937, number of The Journal we cited instances in which licensed Indiana physicians were "selling their souls" for a paltry forty dollars per week by associating themselves with a discredited chain store optical outfit. None of these men were trained refractionists but that mattered not at all to the operator of this chain. We have little complaint about such places as long as they confine their activities to adults, but we do strenuously object to the fitting of glasses to children by anyone other than a trained ophthalmologist. One of our crying needs is to persuade members of our own profession to stop referring children to any except qualified refractionists. Cycloplegics *must* be used in all such cases if the child is to receive proper attention.

The field of conservation of vision is a huge one. It has many ramifications, so many that they cannot be covered in a single editorial. We can but urge that our members keep abreast of the advances in ophthalmology, that they keep in touch with the good work that our Association committee and the Indiana Academy are doing, and that these groups have the active support of every Indiana physician.

MAY DAY HEALTH FOR GROWN-UPS

One of the best ways for us in Indiana to observe May Day, which is set aside each year throughout the United States as Child Health Day, is for all adults who came in contact with children to be sure that they are free from communicable diseases which they might pass on to children. Annually on May first, the public is asked to concentrate its attention upon the problem of making life safer, healthier, and happier for "young America." In order best to accomplish this in past years, one special phase of child health has been considered such as safe birth, normal growth, and protection against diseases by vaccination and immunization.

Now that all of these things have been thought of for the child, The Journal feels that the time has come for the grown-ups to do something themselves to assure the children of Indiana that they are free from contacts with adults who have infectious and contagious diseases. The importance of this phase of child health is so well treated in a concise, convenient little brochure prepared by the American Academy of Pediatrics entitled "Pertinent Facts on Contact Infection of Children" that we wish to call the attention of the public and the profession to this booklet.

This pamphlet summarizes the suggestions upon this subject from fourteen different sources, advocates physical examinations of parents, school teachers, domestic servants, trained nurses, and practical nurses and nursemaids, and all those whose work brings them intimately in contact with children.

Tuberculosis, syphilis, gonorrhea, typhoid, respiratory infections, and skin diseases are among those sometimes transmitted to children by infected adults.

"Periodic health examinations of adults will help prevent children becoming infected with these diseases," says the booklet. "Primary tuberculosis in early childhood is of potential danger later in the life of a child. Children who showed a positive tuberculin reaction at seven years of age developed active reinfection type tuberculosis (adult form) nine times more frequently than those children who did not have a positive tuberculin reaction until older.

"A positive tuberculin test in a child should become as unusual a finding as a positive Wassermann reaction. By periodic medical examination, it is possible to detect infectious tuberculosis in time to lessen the spread of the disease to children or other adults.

In regard to the examination of school teachers, the brochure says, "While the school teacher has not more tuberculosis than the average adult, next to the family, she provides the greatest opportunity for close prolonged contact with the school child. To require the teacher to provide a health certificate, including chest films, would serve to remove this reservoir of infection."

The pamphlet states that innocent contraction of syphilis by children is infrequent because untreated syphilis is infectious for but a few years and, when treated, is not infectious.

"There is no danger of infection when the Wassermann is positive, if the case is of long standing, or if treatment has been given and is continued. . . . No servant or school teacher should be discharged because of having syphilis. A temporary leave of absence is sufficient for enough treatments to render the condition non-infectious, providing treatments are continued."

The point is stressed that domestic servants should not take care of children unless known to be free from communicable tuberculosis, syphilis, and other infectious disease, and that the servant class needs medical examinations more than persons in a higher economic class, but that domestic workers object to being required to have health examinations unless their employers also have had them!

WORTH WHILE RECOMMENDATIONS REGARDING MEDICAL EDUCATION

For some years past, American Medicine has had a committee about which most of us knew very little, yet it is a very important committee—the Advisory Council on Medical Education. From time to time this committee has commented upon various phases of medical education but not until lately have we had from them a statement so far-

reaching and so important as the one recently sent out. This has to do with two things: premedical training and intern teaching. These are two very important phases of medical education.

The Council recommends that all state medical boards require an internship in an approved hospital prior to the granting of a certificate to practice the healing art. In furtherance of this program, the Council sets forth some "Basic Principles of Internship." In these pronouncements, the Council makes it clear that an internship is a very important step in medical education, a sort of "clinical clerkship" to the medical course. Such internships, the Council believes, are the joint responsibility of the medical school from which the intern comes and the hospital in which he chooses to serve his apprenticeship.

The Council also makes bold to suggest that State Boards arrange for a universal reciprocity, that a medical graduate having passed the examination set forth by one state should be eligible to licensure in other states, without further examination. Broadly speaking, we are much in favor of such an arrangement; it seems unfair to require additional examinations, after a candidate has shown he is capable of entering the practice of medicine.

A recent graduate of our own University Medical School made a creditable showing before the Indiana State Board. He chose to serve his internship in another state, perhaps with the idea of locating there at some future time. He was required to take two examinations, the Basic Science Board and the State Medical Board. This was successfully accomplished, but at considerable cost of time and money.

The second recommendation of the Council very strongly appeals to us, so much so that we print it in full: "Recognizing the widening public, cultural and educational interests of medicine, the Advisory Council on Medical Education recommends to the Association of American Medical Colleges, the Association of American Universities and the Association of American Colleges that the college preparation for medical studies above the necessary grasp of the fundamental principles of biology, physics and chemistry *should be devoted to general education rather than additional forms of professional education.*" (Italics ours.)

With this recommendation we are in entire accord; medical men, what with their years of collegiate training, should be men of culture, as well as men of science. The profession is one of dignity and the medical man in any community is entitled to be considered as a man of exceptional learning. However, we who have had intimate contacts with recent graduates, particularly those of us who have been connected with state medical boards, know that too often this is not true. We have found that the four-year pre-medic man is better equipped, intellectually, than the two-year man, but many from each group show a woeful lack of general education. In both the written and spoken language, these defects are very apparent.

In our work with THE JOURNAL we find many instances in which medical men, and this includes the younger group, send in communications that violate all the laws of English, grammar and what have you. Scientific papers, conveying thoughts very much worth while, have to be all but rewritten ere we can use them.

In our opinion much of this can be overcome by proper reading, that is the reading of high class literature. We have known many physicians who, recognizing their educational shortcomings, have set themselves to improve this thing, chiefly by reading books of the higher type. But our greatest problem is with the younger group, the young men who are in pre-medical work. Our colleges and universities should make every effort to give these young folks the scientific background so essential as a foundation for medicine, at the same time not overlooking the so-called cultural phases of education.

THE NEW-DRUG MENACE

Some few years ago the medical profession determined that it might be advantageous to take the lay public a bit more into their confidence, that even a bit of medical propaganda might be beneficial to all concerned. The news press and the lay magazines at once fell in with the program and now one finds scarcely a bit of this sort of literature that does not contain one or more articles concerning medicine and public health.

The lay press is especially fond of stories pertaining to new drugs and new lines of treatment for various diseases. Some papers and some of our lay magazines have most capable writers for these departments, and one nation-wide news service not long ago set up certain restrictions in the handling of such stories for their subscribing newspapers.

These presentations are eagerly read by the lay public, a fact commonly known to physicians. Within a few days after the publication of the discovery of a new drug or a new treatment, the lay public is asking the doctor about it. And, so we are advised by a druggist friend, these folk go to their neighborhood drug store, asking about some new drug they have read about. They not only ask about it, but frequently express a desire to try it out without consulting the doctor.

For example, few of the reading public are unfamiliar with members of the sulfanilamide group; they have read much about it in the lay press and already are asking their physicians about its use in this or that condition. Oculists continue to be questioned about contact lenses, the use of which was so graphically described a short time ago in a magazine article. We recently overheard a discussion as to the respective merits of iodine, mercurochrome, metaphen and merthiolate, by a lay group. The germicidal quotient and the penetrability of the various solutions seemed to be the theme of the conversation.

It is fortunate that two important discoveries in recent years were protected by patent: insulin and the vitamins. One shudders to think what might have happened if insulin had been available to all manufacturers and pharmaceutical companies. We need but recall the Massengill "Elixir" tragedy. While the new federal as well as the new state drug act exercises more control over the sale and use of various products than in past years, yet it is quite possible for the lay public to walk into the drug store and purchase many drugs of potential danger.

The laity is "wised up" in matters pertaining to the sulfanilamides; they have heard so much about the wonders to be expected from this new drug that they have come to believe it is a panacea for every ill. They ask their physician about it—if not their physician, they ask their druggist; they want to use it "on their own."

As usual in such instances, there is much experimentation going on as to the field for sulfanilamide therapy; we venture to say that too many physicians are experimenting with this drug, rather than awaiting the report of our official laboratories, such as the A.M.A. Council.

But our chief concern is the readiness with which the reading public accepts these announcements, and the availability of these new drugs to the lay public. Long, in the *J.A.M.A.* for March 9th, calls attention to some of the new compounds of sulfanilamide, stating that they should be very carefully administered and their reactions should be carefully watched. The first official publication of the Council regarding the use of this group of drugs was issued in 1937. Progress has been so rapid that four revisions of this publication already have been made, which indicates the degree of care that should be observed in their administration.

Two things should be borne in mind regarding new drugs: (1) their indiscriminate use by the lay public should be prohibited; (2) their use by the medical profession should be governed by official reports of authentic investigators.

INDIANA'S "NOBLE EXPERIMENT"

In fact, there are two of them! We refer to the two new laws effective March 1, 1940, concerning the pre-marital examinations and the requirement that all pregnant women must undergo a serological test. These two measures long have been desired by the medical profession but until the public became aroused it seemed impossible to do much about them.

Some time ago Governor Townsend appointed a commission of fifty, equally divided between men and women, to make a study of marriage license laws and to make recommendations to the 1939 legislature concerning the matter. Your editor was a member of that commission and from the first was impressed with the sincerity of its members and with the positiveness with which they set about their task. Their final recommendations were duly presented to the legislative committee in charge of the proposed law and probably had much to do with the drafting of the final bill.

For years Indiana was disgraced by the presence of several "Gretna Greens" where couples with the required license fee, plus the ability to pay for a worthless bit of "cooing dove" engraving, could obtain a marriage permit with little or no consideration for their economic status, their ages, or their degree of sobriety.

For many years, various eugenists tried to break into the legislative halls of the state with measures designed to curb such affairs, but to no avail, for political groups (chief among which was the County Clerk's Association) saw to it that this abundant "gravy" was continued. It was only by dint of a prolonged campaign by the press of the state, plus the support of the medical profession, that the people of Indiana were aroused to action. Members of the legislature are alive to such demands on the part of the voters and they lost little time recognizing these demands.

Twenty other states already have enacted similar legislation. The only bordering state which does not have such a law in effect at this time is Kentucky whose enactment will become effective on January 1, 1941. It is probable that in the next nine months many Indiana folk will seek licensure in that state.

As usual in all matters pertaining to health, much depends upon the physicians of Indiana in the proper enforcement of these new regulations. However, the provisions of the law are so clearly defined and the regulations of the State Board of Health are so definite that there is no burden to be assumed by our folk.

We are particularly pleased with the decision of this Board in the matter of laboratories. True it is that there will be some criticism regarding this, and there will be some intimations that politics had something to do with their selection, but this we personally know is not true. Obviously *all* the laboratories of the state could not be included in this group; hence, some highly efficient institutions were certain to be left off the list. Our opinion is that the approved laboratories are well distributed geographically but that matters not so much. All blood specimens must be sent through the mails, so the time element or the element of convenience does not apply. It might be said in this connection that the use of the mails was one of the provisions suggested by the Marriage Commission in order to insure a delay of three or four days from the time the blood was taken until the issuance of the license.

The second experiment, that having to do with prenatal blood examinations, requires little comment. It is rather odd that there was little or no opposition raised to the enactment of this law. The reading public has come to regard the syphilis problem as one of great magnitude and willingly

subscribes to any measure that will exert some degree of control. Medical men need no enlightenment as to the benefits of such a measure, for they know too well of the thousands of new-born who are ushered into the world with a luetic handicap, many of them to learn of their misfortune too late in life to do much about it.

Thus Indiana enters upon these two "experiments" under favorable conditions—favorable because the two laws were enacted in response to a general demand. The medical profession will have much to do with the proper enforcement of these new regulations and we believe that Medical Indiana will play her full part and play it well.

The interest of the Committee on Conservation of Vision of the Indiana State Medical Association is primarily in the development and furtherance of preventive measures in connection with blinding diseases of the eye. In order to assist the State Committee with its program, each county medical society has been asked to appoint a county chairman on the conservation of vision. These local committees are now being appointed rapidly.

A seven point program has been adopted:

1. Prevention of ophthalmia neonatorum through the use of approved prophylaxis and complete reporting of all cases to health authorities.

2. Prevention of blindness by syphilis. (New marriage law and prenatal Wassermanns should reduce the incidence of this disease.)

3. Pre-school care of eyes through examination of children at two or three years.

4. School age care of eyes through standardization of eye examinations and efforts to see that corrective measures are undertaken as early as possible; increase in sight saving classes in public schools. (One sight saving class for every 500 children is recommended.)

5. Prevention of eye accidents from fireworks, guns, and sling shots, as well as from industrial accidents. (The new state ban on fireworks will assist.)

6. Education of physicians, nurses and the public.

7. Elimination of trachoma in Indiana.

Editorial Notes

In the *Western Journal of Surgery* for January 1940, Drs. H. M. Nichols and A. W. Diack, of Portland, Oregon, report that preliminary studies conducted on dogs indicate that nylon, a new synthetic silk substitute, compares favorably with silk as a suture material.

An old friend of THE JOURNAL, Dr. L. W. Brown, of Indianapolis, writes that he is recovering from a coronary attack and that he expects to be up and about his affairs in a short time. Like most medical men, he found the confinement quite a chore but recognized that this was the only sensible procedure.

Through its Conservation Department, the State of Indiana has acquired something like eighty-five miles of shore line, along the banks of her various streams. While we would like to see this figure at least quadrupled, yet eighty-five miles is a good start on such a program; it assures Hoosiers, present and future, of several mighty nice recreational spots.

If you have any books and magazines that you will part with, give them to the State Department of Public Welfare for the libraries of state institutions, particularly mental hospitals. See the announcement on page 283.

May is the month usually chosen for district society meetings, at least eight being set for this month. These meetings have come to be of the utmost importance, filling in the gap between our annual sessions. Better arrange to attend at least one or two of these in your neighborhood; this will serve as a "tuner-up" for the big show, come next October, at French Lick.

On advertising page v in this issue appears the page advertisement of the annual postgraduate course of the Indiana University School of Medicine. The course is jam-packed with clinics and lectures of interest and benefit to every Indiana physician. Make your plans now to attend. With such speakers as Dr. Roy McClure and Dr. F. W. Hartman of Detroit, Dr. W. D. Stroud of Philadelphia, Bryng Bryngelson, Ph.D., Dr. E. L. Compere of Chicago, and Dr. Paul Harrison, medical missionary, you cannot afford to miss it.

Reports filtering in from various component societies seem to indicate that the average fee for pre-marital examinations is three dollars; in some instances where both parties present themselves for examination the combined fee is five dollars. This seems a fair fee, one that should cause little complaint on this score. However, we continue to wonder what the County Clerks Association is doing about the excess charge for the "cooing doves" bit of unnecessary paper which so commonly is sold in connection with the marriage license.

The Connecticut State Jornal of Medicine now represents not only the Connecticut State Medical Association but also the Connecticut State Hospital Association. From an editorial in the January, 1940, issue, we quote: "It is well . . . that these groups, each having their own peculiar problems, should work together for their mutual helpfulness and their common objectives. This cooperative venture on the part of our two organizations opens the way for the development of a finer public relationship and it is the hope of the members of the Hospital Association that much good may come to both organizations." This sounds like good, common sense to us. "United we stand . . .!"

Editor Hargrave, of the Rockville, Indiana, *Republican*, in commenting on the cheapness of human life, concludes an editorial with this statement: "But in battle no one thinks of the value of human life. Rulers must win, no matter the cost. No matter how many young men are sacrificed, no matter how many homes are broken. Human life is the cheapest thing on earth and apparently cheaper now than ever before." The European war situation becomes more complex each day; the lust for Power, as exemplified by a megalomaniac, regardless of the cost in money or men, is more than a blot upon civilization, it is beyond the ability of mortal man to properly describe.

Some time during the month of May, Indiana physicians will receive a little bill from Uncle Sam, calling upon them to check up on the supply of narcotics and make the annual contribution of one dollar to the Collector of Internal Revenue. This annual report and the accompanying dollar must be in the office of that official not later than June 30th, a very severe penalty being the alternative. Wonder how many physicians recall when the tax for this purpose was something like five dollars per annum? In other words, for a good many years the medical profession, through this narcotics tax, paid the major share of the cost of enforcement of the Harrison law.

Vacation time is upon us. In another month or so most Hoosier medics will be planning their annual leaves of absence. Whether this takes one to New York to attend the annual A.M.A. meeting, to one of the coasts, to a good fishing spot, or just "going places," the vacation is a necessity. Physicians should bear in mind that their profession is a very exhausting one, physically and mentally; nor should they forget that continuous work brings on many preventable diseases. A casual perusal of the obituary page of the A.M.A. Journal will suffice to stress the fact that coronary disease, so commonly known as the "doctor's disease," takes an annual heavy toll among physicians. One need not go far away; many medical men take their whole vacation right here in Indiana. The big idea is to get away from your office and relax.

So much has been written regarding the usefulness of sulfapyridine in various disorders and so little about its failure to produce good results, that we are constrained to mention the experience of Kinell and Ernstene (reported in the *Cleveland Quarterly Clinic*, for April, 1940), who report utter lack of success in the use of this drug in five cases of sub-acute bacterial endocarditis. They state that its use in these cases was "uniformly disappointing."

Almost twenty years ago the Council of the Indiana State Medical Association issued the pronouncement that the local county medical society was the sole judge as to the qualifications of its members. Since that time the council has had occasion to refer to the ruling and to declare that the State Association had no right to interfere with matters pertaining solely to county medical society business. Not long ago two members of a county medical organization became involved in what amounted to a personal squabble and the matter was referred to Association headquarters. Again was the ruling made that the Association could take no part in the quarrel, that it was a matter between two members of a component society. It is extremely unfortunate that such occasions arise but we do not see that the Association can do much about them.

In five months we will be on our way to French Lick, the occasion being the annual convention of our Association. This meeting promises to eclipse all former gatherings, both in point of attendance and program interest. A preview of the program drafted by the Association committee would seem to assure attendants of a crowded three days. Then, too, the entertainment features are out of the ordinary. George Dillinger writes that nothing

will be left undone to insure the personal comfort of everyone and that each hour of the day will afford many unusual pleasures.

The Auxiliary is planning a special program for this occasion, so you'd better take the Missus with you, not forgetting to make your hotel reservations well in advance.

Better drop a note to Tom Taggart, right now, telling him you are coming down and to save a room for you. Tom, by the way, says he will be on the job throughout the meeting; in fact, he is head man on the reception ocmmittee.

Neck pain, gastric upsets, and severe symptoms frequently are due to ocular disturbances, according to A. D. Ruedemann, M.D., who writes on "Headache and Head Pain" in the March 1940 issue of *The Journal of the Michigan State Medical Society*. Referring to the group of people who have faulty eye musculature, he points out that exercises, surgery, glasses, or all three may be required for proper correction. He adds, "I can also tell you that many of these patients require medical treatment for a deficiency in thyroid or vitamin A. Some have general muscle exhaustion due to menopausal disturbance or some cerebral disturbance. It is well to remember that a patient with ocular muscle imbalance may have his primary disturbance elsewhere, the muscle trouble being secondary and the pain the tertiary portion of the entire picture. It is well to think of these patients as sick people who need more than a pill—they need careful study and definite management. Anything short of this fails to relieve the pain."

The recent panel discussion before the Indiana Advisory Health Council, a Governor's commission, clearly demonstrated that greater cooperation between the social service workers and the medical profession is needed. This can best be obtained by further study and further discussion between the two interested groups. The salient points brought up for discussions at the meeting were as follows: (1) All medical service work must be under medical supervision; (2) Properly trained social workers are of great benefit and aid to the medical profession; (3) Should medical social service workers be recruited from the nursing profession, with additional college training in social sciences? (4) The best welfare set-up for any situation is a well-trained general social worker and a competent nurse working under medical supervision; (5) Are medical social service workers ever needed except in highly specialized fields? (6) Should social service workers be licensed? The discussions, while not finally answering all of the above questions, did tend markedly to clarify the atmosphere. It is to be hoped that through further study and discussion we will be able to obtain greater cooperation between these two groups.

The "Blond Senator," otherwise known as the executive secretary of the Indiana State Medical Association, does quite a bit of intrastate travel each year; he goes places, does things and sees things being done. For the first time in many moons he made an official visit to Lake county, recently. Coming by the way of Chicago, he was met by an official delegation who entertained him at dinner. Then a night ride into Indiana, via the South Shore Drive, whereat he marveled at Chicago's night skyline. He veritably was catapulted into a meeting of the local society, with more than one hundred members in attendance, and a few moments later was ushered into another part of the building, where the Auxiliary was in session, with attendance at the century mark. Here he had been billed as the speaker of the evening and for almost three hours—he didn't speak that long, however—he was entertained by that group, what with their various plannings. Early the following morning he was taken in tow by "Henry" Waterson, local executive secretary, who showed him about the "plant," visiting both the Hammond and Gary offices of the society. Tom left for home that evening, filled with enthusiasm over the setup of a modern county medical society.

The late Phineas T. Barnum once said, "There is one born every minute!" We have located three of them in Gary, Lake County, Indiana, despite the fact that THE JOURNAL has told its readers to be on the lookout for a gentleman claiming to be a farmer who has just come to town with a load of something or other and is desirous of professional services. The chap used the name of G. C. Powers on this occasion, calling on three local eye, ear, nose and throat specialists, seeking relief from a nasal condition. (Throughout the Middle West this fellow has been ordering glasses.) As is his custom, he called on the three Gary men after banking hours and proffered a check in payment for the services rendered, the amount of the check being far in excess of the fee. In two instances the check was for fifteen dollars, in the other for ten dollars. The chap is described as being of middle age, neatly dressed, and he expressed himself as being highly pleased with the treatments he received. On this occasion he represented himself as a Cedar Lake farmer who had come to town with a load of turkeys. He left Gary with something like thirty doctor-dollars in his pockets, plus three perfectly good nasal treatments. He also left three physicians bemoaning a loss that would not have occurred had they even casually looked over the editorial notes in THE JOURNAL for the past year or two!

Last June we made editorial comment on the retirement from active practice of Alois B. Graham, a former president of our Association, opining that

he would continue his contacts with his profession although he had closed his office. In a recent letter from Dr. Graham, he states that after leaving Indianapolis he spent some time in his home town of Madison, Indiana, then for a period was in Texas, but now is living in Terre Haute. Friends of Dr. Graham—and they are legion—will be interested to learn that he has accepted the invitation of the Executive Council of the American Proctologic Society, of which he has been a Fellow for thirty-two years, to deliver the Joseph M. Matthews oration at the Richmond, Virginia, meeting in June of this year. Dr. Matthews, formerly of Louisville, Kentucky, was a pioneer in the field of proctology in the Middle West. A student of his and a former associate, the late George J. Cook, was for years head of this department in the Indiana Medical College. For many years Dr. Graham was associated with Dr. Cook and upon the latter's retirement, Dr. Graham assumed the chair of gastroenterology in the medical school, continuing in that post until his own recent retirement. "A. B." says he surely will see us in French Lick, and he is looking forward to that meeting with much pleasure.

Comment concerning the country doctor is becoming quite common; one notices these references frequently in newspapers and lay magazines. The Indianapolis *Star*, February 21, editorially comments on the subject, referring to an Illinois physician who had served a country community for some sixty-three years. The writer thus concludes his comment:

> "That Illinois doctor was not exceptional. He may have lived longer than some and monopolized more the practice of his community. There are many small communities, however, with their 'country doctors' who are real benefactors of humanity, practicing without hope of great material reward and usually content with the satisfaction which comes through service to one's fellow men. Some of them may be a trifle old-fashioned, but their methods are effective.
>
> "Many in larger communities wish there were more 'country doctors,' those friends of the household who are almost a part of the family circle. Their ranks have been thinned by the era of specialists, but the esteem and respect in which they are held may effect a revival of the general practitioner. Financial returns may be small, but professional ethics, the respect of young and old and the joy of service pay rich dividends to a loving heart."

The suggestion has been made that the second meeting of the House of Delegates be held at noon, on the last day of the meeting, rather than at a seven o'clock breakfast as has been the custom for many years. The scientific program committee complains that this meeting seriously interferes with the attendance at the general session, on the morning of the last day of the meeting. This brings up an old question, one that has puzzled Association officials for many years. Various changes in procedure have been tried, but the final House session continues to be a lengthy one. We still are of the opinion that the early breakfast hour is the best time for this meeting and that the business of the House can materially be speeded up. For example, we continue with the archaic roll call, which dates back to the long regime of the late Dr. George Dewey Miller, who got more kick out of this roll call than from any other event in his busy life. As a matter of fact, all delegates register as they enter this meeting, hence the twenty or more minutes used in the roll call are but a waste of valuable time. It should be borne in mind that the last day is "get-away day," a time when everyone is in a hurry to get started back home and it has been our observation that numerous members leave during the morning hours, regardless of the strength of the program. We do not believe changing the time of meeting of the House of Delegates will be of material benefit; on the other hand, we feel that such a change will prove a most unpopular one to the majority of the delegates.

Fifty years in the practice of medicine is an accomplishment reached by comparatively few physicians, yet two Indiana men recently were feted by their fellow townsmen on such an occasion. In Muncie, Dr. Hugh A. Cowing, for many years serving as the head of the Indiana State Board of Health and organizer and president of the Muncie Y.M.C.A., was the honor guest at a surprise luncheon. Among the many congratulatory informal talks and in the letters received from friends unable to attend was a letter from Dr. William A. Spurgeon, life-long friend and associate of Dr. Cowing. Letters also were read from Frank C. Ball and other prominent residents of the Muncie neighborhood. In Indianapolis, Dr. Louis Burckhardt was feted at a dinner in his honor at the Marott hotel. Reverend George A. Frantz, his pastor, Hugh McK Landon, and Dr. W. D. Gatch were the formal speakers for the occasion. Up in Berne, Indiana, Dr. Amos Reusser celebrated his forty-fourth year in medicine in an unique manner. According to the Berne *Witness*, Dr. Reusser donned a plug hat and swallow-tail coat and made his calls upon his patients in the local hospital much in the manner of the young physician of forty or more years ago who deemed it perfectly proper to wear a silk tile and Prince Albert coat when engaged in his professional duties. Such events as these are more than milestones in Indiana medicine; they are evidences that, after all, a successful, long-continued medical career is not unnoticed by the public, and that the medical profession continues to be recognized as one of dignity and importance.

President's Page

PLIGHT OF THE VOLUNTARY HOSPITALS

Considerable thought should be given to the welfare and safety of the nonprofit hospital. I wonder if the medical profession and the public realize the debt of gratitude they owe these institutions? Until thirty years ago, all general hospitals in the State of Indiana (with the exception of one or two city hospitals) were of the voluntary type, either under the management of the church or nonprofit corporations and associations. At the present time there are 3 Federal hospitals with 438 beds, 1 state hospital with 566 beds, 23 county hospitals with 984 beds, 4 city hospitals with 748 beds, 28 church hospitals with 3,861 beds, 16 nonprofit corporation and association hospitals with 1,201 beds, 2 individual and partnership hospitals with 12 beds, and 2 corporation hospitals with 161 beds. Of the beds in voluntary hospitals, there are 5,062. Outside of the beds in the county and individual hospitals, practically all beds for private patients are furnished by the voluntary hospitals.

The cost of hospital service has increased greatly in the last few years, not only for the private patients but for the indigent. This increase in cost is largely due to the necessity of keeping the hospital up-to-date through the purchase of new and modern equipment which is a constantly increasing expense. The rigid requirements of dietary and medical management and the general increase in cost of maintenance have combined to produce this drastic increase in hospital costs. The source of large gratuities and gifts upon which voluntary hospitals formerly depended have gradually dried up so that these hospitals must be self-supporting.

There has been an increasing demand for prepayment of hospital care by means of group hospital insurance in the belief that this would not only be of benefit to the patient but also to the voluntary hospital. In various large centers there are in effect successful nonprofit plans of hospital insurance which have largely passed the experimental stage. The delegates of the Indiana State Medical Association have gone on record as favoring a program of group hospital insurance, and I personally believe that such plans should be available in our state. The State Medical Association supported legislation which would have made such insurance possible in Indiana. Yet we must face the facts and realize that there are some very definite pitfalls for the voluntary hospital if such insurance plans are extensively put into effect.

Where the benefit is paid directly to the patient, he may take the type of accommodation that is extended by all voluntary hospitals as part charity. Provision should be made to prevent this procedure.

There would seem to be little doubt that if prepayment of hospital care becomes widely accepted, the available beds in the voluntary hospital will be insufficient to take care of the demand because it is an established fact that such patients require longer hospitalization than those who pay directly for their hospital service. As a proof of this, a few figures may be given:

During the year 1939, the Indianapolis City Hospital with a bed capacity of 677 and a daily census of 522 had 11,671 admissions; the State University hospitals with a daily census of 446 had admissions of 8,790; the Federal Administration Facility with a daily census of 164 had admissions of 1,633. Compare these figures with those for the Indianapolis Methodist Hospital with a daily census of 431 and total admissions of 23,917, and for the St. Vincent's Hospital with a daily census of 180 and approximately 7,000 admissions. The character of the work done in all these hospitals is approximately identical. The figures should be very illuminating.

In the ordinary course of events, it would seem inevitable that in a short time the private beds available in voluntary hospitals in Marion county will be insufficient. Thirty years ago there were approximately 275 beds for private patients and 200 beds at the city hospital. The voluntary hospitals were at that time utilized widely by the counties in the central part of the state as there were no county hospitals and only a few voluntary institutions within a radius of fifty miles. Following the war, most of these counties erected memorial hospitals. Invariably these have not only become utilized to capacity but in most cases expansion has been necessary. In addition, the number of hospital beds in Indianapolis has increased to the rather large total of 2,429 of which 940 are in voluntary hospitals.

And now comes what may possibly prove to be the greatest threat of all toward voluntary hospitals—the new government program which plans the construction of hospitals with the use of WPA labor at $1,500 per bed as against about $3,000 per bed which has been the approximate cost for the construction of voluntary hospitals now in service. If such a program becomes extensive in Indiana, it certainly will have a very deleterious effect upon our present voluntary hospital system to which we owe so much. With the constant threat of government competition in the building of new hospitals, it can readily be seen that no expansion on the part of voluntary hospitals can reasonably be expected.

Karl R. Rucksell

INDIANA COUNCIL FOR COORDINATION OF SERVICES FOR THE BLIND

STATEMENT OF PURPOSES AND OBJECTIVES*

The utilization of all the interests in the welfare of the blind in the way best calculated to stimulate the continuance and increase of such interests is one of the objects of the Council of Coordination of Services. That one object is of great importance in the achievement of the ultimate twofold purpose of the organization, which is, first, the conservation of vision; second, the betterment of the lot of the blind. We believe that the best stimulus to increase and continue existing interests in the welfare of the blind comes from satisfying proofs that such interests are not in vain but are resulting in genuine accomplishments, and from the encouragement of knowing that we are not working alone but that others are working with us on a plan so comprehensive that the intended result can be worthy of our efforts and enthusiasm.

We realize that, with the numerous groups working directly for the welfare of the blind and for the prevention of blindness, there is need for the coordination of their work. This council hopes to function as a coordinating agency rather than as an agency for direct action. In other words, it is hoped that this council may be able to bring together and coordinate the efforts of all groups working in this field to carry out the program stated below as fully as possible.

Upon these considerations we submit the following program:

1. To do everything possible to aid in making the sighted conscious of their continuing responsibility for the welfare of the blind, to the end that:

a. A blind person may have the best opportunity possible to be useful, happy, and self-supporting in his own native community;

b. There be a generally accepted division of labor leaving open to the blind such employments as their handicap will permit;

c. There be a general willingness of the sighted to supply an ample market for the products of the blind, and to go a little out of their way to bring to the blind such business as the blind can transact;

d. The blind shall have an opportunity to earn not only a mere subsistence, but something of that abundance without which even the sighted feel life is scarcely endurable.

2. To cooperate with the State Medical Association Committee on Conservation of Vision by:

a. Recognizing that preventive measures and treatment plans for blinding diseases and conditions are within the field of highly specialized scientific medicine; and therefore, by depending on the State Medical Association Committee for leadership in this work;

b. Doing whatever we can, with the approval of the Medical Association Committee, to bring the work they are doing to the favorable attention of the public to the end that all cases of trachoma and other blinding diseases may be found and genuinely scientific treatment may be given as early as possible;

c. Doing all within our power to help create that public confidence in scientific medical methods which is necessary to bring about its universal application to the prevention and cure of blindness; and

d. Aiding in making successful all efforts at publicity through which the public may be informed concerning the possibilities of conservation of vision and curing of blindness.

3. To stimulate public interest in providing Sight Saving Classes and Educational Opportunities for partially sighted, by:

a. Obtaining data on needs therefor, and possibilities thereof;

b. Studying programs of other States; and

c. Giving publicity to necessities and possibilities.

4. Through the School for the Blind to create a wider public interest in the blind by:

a. Encouraging people individually and in groups, to visit the school and learn of the work it is doing; and

b. Helping supply opportunities for the children to contact the public by aiding in programs and otherwise.

5. To assist in carrying out the following suggestions of the Board of Industrial Aid for the Blind:

a. Supply talking books to all adult blind who desire them;

b. Continue the present workshop principle but on an expanded basis;

c. Increase home work for blind men and women;

d. Arrange six-weeks' summer training courses for adult blind at the School which would emphasize Braille and vocational subjects; and

e. Employ a supervisor to aid present operators of merchandising stands and to find opportunities for and install a larger number of stands, especially in smaller cities and towns.

6. To encourage the continued activity of all groups working in any way on the problem of blindness, by:

a. Trying to find needed information;

b. Creating opportunities for and encouraging the sighted to become personally acquainted with blind people;

c. Obtaining publicity for such work where desired and the publicity would be an aid to accomplish the purpose in mind;

* Adopted March 13, 1940.

d. Suggesting definite things for specific groups to undertake; and

e. Obtaining special public recognition of the work of specific groups, for the encouragement of their members in carrying on the work.

7. To cooperate with the Welfare Department in the interests of assistance for the blind and of the prevention of blindness.

8. To cooperate with the Rehabilitation Division of the Department of Education in its activities affecting the blind.

9. To act as a clearing house for the exchange of ideas for the conservation of vision and for the good of the blind; and as a means of accelerating the consummation of purposes approved and accepted by the Council.

WALTER L. SHIRLEY, *Chairman.*

TWENTY-FIVE YEARS AGO

Items from THE JOURNAL of May 15, 1915

Bernhard Erdman discussed the Wassermann reaction, probably one of the earlier papers on this subject, in THE JOURNAL. Rhamy of Fort Wayne and Mertz, then of LaPorte, were the discussants.

J. C. Beck, Chicago, was guest speaker for the Eye, Ear, Nose and Throat section, and talked on borderland eye and ear cases. Wales and Newcomb, Indianapolis, and Brose, Evansville, followed with their discussions.

F. C. Heath, Indianapolis, talked on ocular tumors; Ruby, Bulson, Brose and Maurer were the discussants.

Hughes, of Indianapolis, discussed the effect of light upon the eye. Shanklin was the only discussant and the record shows that he talked a lot.

Editor Bulson, long-time vacation advocate—and he had many of them—editorially discussed the topic in this number. He suggested combining a vacation trip with attendance upon the San Francisco A.M.A. session. Baking powder and pneumonia occupied the remainder of the editorial space in this number of THE JOURNAL.

Dr. James H. Ford, for many years chief Surgeon of the Big Four railroad, died at his home in Indianapolis.

Dr. A. R. Simon, Laporte, suffered a broken arm while cranking his automobile.

J. M. Dinnen, Fort Wayne, and C. B. Kern, Lafayette, were appointed to the State Board of Health, the latter succeeding T. Henry Davis.

The outlook for a new tuberculosis hospital in Lake County seems very good.

Boone County commissioners have appropriated $15,000 toward a new county hospital; Mrs. F. J. Witham, a local resident, has made a similar contribution.

Dr. J. W. Scott, Hecla, while attending a district meeting at Fort Wayne, broke both bones of his right arm while cranking his automobile.

District Meetings

FIRST DISTRICT MEETING

President, Lee Springstun, M.D., Chrisney.
Secretary, Stephen L. Johnson, M.D., Evansville.
Councilor, I. C. Barclay, M.D., Evansville.

EVANSVILLE COUNTRY CLUB
MAY 23, 1940

Principal speaker will be H. G. Hamer, M.D., Indianapolis, whose subject will be "Urinary Tract Infection and the General Practitioner."

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SECOND DISTRICT MEETING

President, J. B. Maple, M.D., Sullivan.
Secretary, J. S. Brown, M.D., Carlisle.
Councilor, H. C. Wadsworth, M.D., Washington.

SULLIVAN—METHODIST CHURCH ANNEX
JUNE 6,1940

The meeting will begin at six p.m., with the following program:

Registration

Dinner (Musical program during dinner hour)

7:30 p. m. "The Surgical Management of Complicated Thyroid Conditions."
Goethe Link, M.D., Indianapolis

8:30 p. m. "The Treatment of Brain Injury and Skull Fracture."
E. Vernon Hahn, M.D., Indianapolis

9:30 p. m. Election of officers

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THIRD DISTRICT MEDICAL MEETING

President, C. E. Briscoe, M.D., New Albany.
Secretary, Ivan Clark, M.D., Paoli.
Councilor, W. H. Garner, M.D., New Albany.

This meeting is scheduled to be held in New Albany in May but no program has been received.

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FOURTH DISTRICT MEETING

President, H. P. Graessle, M.D., Seymour.
Secretary, H. E. Miller, M.D., Seymour.
Councilor, M. C. McKain, M.D., Columbus.

SEYMOUR—ELKS' CLUB
MAY 8, 1940

Program

Forenoon—Golf at the Seymour Country Club

12-1 o'clock—Luncheon at the Seymour Country Club

1:00 p. m. Scientific program at Elks' Club

1:00 p. m. "The Specificity of Infections" (Motion picture)

1:45 p. m. "Undulant Fever in My Own Practice"
W. C. Callaghan, M.D., Greensburg

District Meetings

2:10 p. m. "Gall Bladder Disease"
George A. May, M.D., Madison

2:35 p. m. "Supervision of the Normal Infant by the Family Physician"
Harold E. Miller, M.D., Seymour

3:00 p. m. "Treatment of Advanced Peritonitis" (Illustrated with slides)
Thomas B. Noble, Jr., M.D., Indianapolis

4:00 p. m. "What the General Practitioner Should Know About Allergy"
Bennett Kraft, M.D., Indianapolis

6:30 p. m. Banquet at the Elks' Club
Illustrated Lecture on the Navajo Indians, by Thomas B. Noble, Jr., M.D., Indianapolis

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FIFTH DISTRICT MEETING

President, John Palm, M.D., Brazil.
Secretary, James V. Richart, M.D., Terre Haute.
Councilor, O. O. Alexander, M.D., Terre Haute.

ELKS CLUB—TERRE HAUTE
MAY 10, 1940

The Fifth District Meeting will be held in conjunction with the Vigo County Medical Society, the Aesculapian Society of the Wabash Valley, and the Terre Haute Academy of Medicine.

The principal speaker will be Dr. Alphonse McMahon, St. Louis, Missouri, clinician and vice-president of the American Medical Association.

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SIXTH DISTRICT MEETING

President, Walter U. Kennedy, M.D., Newcastle.
Secretary, Jesse E. Ferrell, M.D., Fortville.
Councilor, Samuel Kennedy, M.D., Shelbyville.

BROOKVILLE, INDIANA—MAY 15, 1940
(Magnesia Springs)

Program

Morning

10:00—Welcome Address. E. M. Glaser, M.D., Brookville.

10:15—Motion picture. "Acute Exanthematous Diseases." An unusual film, in colors, from the University of Michigan.

11:00—"Osteomyelitis." Elsie Asbury, M.D., Cincinnati, Ohio.

Recess for Dinner

Afternoon

1:00—"Recent Developments in Diagnosis and Treatment of Intestinal Obstructions." W. D. Gatch, M.D., Indianapolis.

1:45—"X-ray Diagnosis in Abdominal Diseases." Bruce Stocking, M.D., Ball Hospital, Muncie.

2:30—"Safe Home Delivery." (Moving picture.)

3:00—"Care of the Premature and Newborn Infant." Frances T. Brown, M.D., Indianapolis, and Margaret Borst, R.N., Indianapolis.

(Motion pictures for this program are supplied by the Bureau of Maternal and Child Health of the Indiana State Board of Health.)

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SEVENTH DISTRICT MEETING

President, Russell Sage, M.D., Indianapolis
Secretary, E. W. Dyar, M.D., Indianapolis
Councilor, C. J. Clark, M.D., Indianapolis

The Seventh District society held a meeting in conjunction with the Indianapolis Medical Society in Indianapolis, April thirtieth. The regular program for the Indianapolis society was presented.

The annual meeting of the district society will be held in the fall, as usual, probably in November.

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EIGHTH DISTRICT MEETING

President, L. G. Montgomery, M.D., Muncie.
Secretary, S. W. Litzenberger, M.D., Anderson.
Councilor, M. A. Austin, M.D., Anderson.

ELWOOD, JUNE 19, 1940

Plans for this meeting are incomplete but tentative plans include a golf tournament in the forenoon, a scientific session in the afternoon, dinner in the evening, followed by a guest speaker and a business meeting.

Complete program will be published in the June issue of The Journal.

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NINTH DISTRICT MEETING

President, J. R. Burlington, M.D., Attica.
Secretary, Lee J. Maris, M.D., Attica.
Councilor, F. T. Romberger, M.D., Lafayette.

ATTICA—MUDLAVIA SPRINGS HOTEL
May 16, 1940

(Register at Mudlavia Springs Hotel or Harrison Hills Country Club at 9:00 a.m.)

9:00 a. m. Golf tournament at Harrison Hills Country Club

District Meetings

12:30 p. m. Delegates' Dutch Luncheon at Mudlavia's new Club House
Ladies' luncheon at the Club House followed by bridge and excursions for the ladies.

2:00 p. m. "Drip Treatment of Syphilis"
Frank Cregor, M.D., Indianapolis

3:00 p. m. Movie from State Board of Health

4:00 p. m. "Significance of Chest Pain and Its Relation to Heart Disease"
Robert Moore, M.D., Indianapolis

6:30 p. m. Dinner at Mudlavia's new Club House
Speaker: Harold Van Ormand, Evansville

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TENTH DISTRICT MEETING

President, Harry E. English, M.D., Rensselaer.
Secretary, A. R. Kresler, M.D., Rensselaer.
Councilor, James M. White, M.D., Gary.

HAMMOND—WOODMAR COUNTRY CLUB
MAY 23, 1940

Program

2:00 p. m. "Safeguarding Adoption"
Miss Margaret Emery, Lake County Department of Public Welfare, Gary

2:30 p. m. "Superficial Fungus Diseases"
John E. Dalton, M.D., Indianapolis

3:20 p. m. "Bleeding During Pregnancy"
Carl P. Huber, M.D., director of postgraduate education in obstetrics, Indiana State Board of Health, Indianapolis

4:20 p. m. "A Clinical Evaluation of Bile Salt Therapy in Gall Bladder Disease"
Rollin H. Moser, M.D., Indianapolis

5:10 p. m. "Neurological Examination of a Patient"
Lewis J. Pollock, M.D., Chicago

6:30 to 7:30 p. m. Dinner

7:30 p. m. "American Medicine and the National Government"
Morris Fishbein, M.D., Editor of The Journal of the American Medical Association, Chicago

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ELEVENTH DISTRICT MEETING

President, Eva Kennedy, M.D., Camden.
Secretary, O. G. Brubaker, M.D., North Manchester.
Councilor, Ira Perry, M.D., North Manchester.

HUNTINGTON—LAFONTAINE HOTEL
MAY 15, 1940

This will be the sixty-third semi-annual meeting of the Eleventh District Medical Society.

Program

Morning

10:00-12:00 Clinic at Hotel Lafontaine in charge of Arrangements Committee

Samuel M. Feinberg, M.D., of Chicago, will present and discuss a number of cases of contact dermatitis of allergic origin.

Afternoon

2:00 p. m. Business and scientific program
After the business meeting the following program will be presented:

I. Presidential Address
Eva M. Kennedy, M.D.

II. "Allergic Diseases of the Summer"
Samuel M. Feinberg, M.D., Chicago

III. "Anemias—Mode of Origin, Diagnosis and Treatment"
Earl B. Jewell, M.D., and W. Z. Barnett, M.D., Logansport

IV. "Varicose Veins"
Herbert L. Egbert, M.D., Indianapolis

V. Representatives of the Indiana State Medical Association will talk.

6:30 p. m. Banquet
Music by the Lafontaine String Ensemble
Speaker: "Dusty" Miller, Wilmington, Ohio

Facilities of the Lafontaine Country Club, three miles north of Huntington, will be available to all who wish to play during the morning.

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TWELFTH DISTRICT MEETING

President, C. C. Rayl, M.D., Decatur
Secretary, S. R. Mercer, M.D. Fort Wayne
Councilor, A. J. Sparks, M.D., Fort Wayne

This society held its annual meeting in Fort Wayne, April second. A complete report of the meeting will be found in this Journal on page 278.

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THIRTEENTH DISTRICT MEDICAL MEETING

President, G. O. Larson, M.D., Laporte.
Secretary, F. G. Perry, M.D., Plymouth.
Councilor, Alfred Ellison, M.D., South Bend.

The annual meeting of the Thirteenth District usually is held the first Wednesday in November. No meeting is scheduled for May.

PROGRAM FOR POSTGRADUATE COURSE IN PEDIATRICS SPONSORED BY THE HENDRICKS AND BOONE COUNTY MEDICAL SOCIETIES IN COOPERATION WITH BUREAU OF MATERNAL AND CHILD HEALTH OF INDIANA STATE BOARD OF HEALTH

Note: The first three of this series of meetings were held at the Witham Memorial Hospital, Lebanon, on Thursday, April 18, April 25, and May 2. The fourth meeting on May 9 will be in Indianapolis, as a part of the Annual Postgraduate Session of Indiana University School of Medicine. The fifth and sixth meetings on May 16 and May 23, will be held at Crawley's Hall on the northeast corner of the square in Danville. The meetings will begin with dinner to be served at 6:00 P. M.

First Meeting—Lebanon—Thursday, April 18
Contagious Diseases — Control and Curative Treatment.

Second Meeting—Lebanon—Thursday, April 25
Gastro-intestinal Disorders—Proper Feeding; Diarrhea; Common Surgical Disorders of the Abdomen.

Third Meeting—Lebanon—Thursday, May 2
The Newborn—Care of the Premature and Newborn Infant (with motion pictures).

Fourth Meeting—Indianapolis—Thursday, May 9
Postgraduate Session on Pediatrics of Indiana University School of Medicine. For content of program see page v.

Fifth Meeting—Danville—Thursday, May 16
Respiratory Tract Infections — Nasopharyngitis; Bronchitis; Pneumonia; Bronchiectasis; Childhood Tuberculosis.

Sixth Meeting—Danville—Thursday, May 23
Treatment of Genito-urinary Conditions in Children—Acute and Chronic.

EXTRAMURAL POSTGRADUATE COURSES IN OBSTETRICS CONTINUE THROUGHOUT THE STATE

On Thursday, April 4, the sixth and last meeting of the series of postgraduate courses in obstetrics sponsored by the Hendricks and Boone County Medical Societies in cooperation with the Bureau of Maternal and Child-Health of the Indiana State Board of Health, was held. This course, the program for which appeared in the February, 1940, issue of the *Journal of the Indiana State Medical Association*, was conducted during six meetings, held on Thursday evenings of consecutive weeks from February 29 through April 4. The meetings began with a dinner served at 6:00 p. m. Each weekly session consisted of two to three hour lectures, with motion pictures used for some subjects. The courses covered instruction on some of the more prevalent complications of pregnancy, such as postpartum hemorrhage, toxemias of pregnancy, eclampsia, the use of forceps, the Cesarean section, and puerperal infections.

The response of the local county medical societies was very gratifying. A tabulation of the records of attendance indicated that better than 57 per cent of the members of the two societies attended all six sessions.

A similar course, scheduled for six weekly sessions, is in progress for the Cass County Medical Society. Here again the physicians have been very enthusiastic in their response, and the weekly attendance is indicative of the interest on the part of the physicians of this area.

The Wayne-Union County Medical Society and the Vigo County Medical Society have chosen to vary the courses in their respective regions, and have condensed the material to four weekly meetings, the afternoon sessions being held from 4:00 to 6:00 p. m., with the evening sessions following dinner from 7:00 to 9:00 p. m. The same material is being covered in these courses, the one in the Wayne-Union Society starting on April 11, and the course in Vigo County starting on April 12. The program for this course follows.

First Meeting—April 12—Friday—Union Hospital
4:00-6:00 P. M. 1. Antenatal Care
2. The Mechanism of Delivery (With motion pictures)
7:00-9:00 P. M. 1. The Management of Labor
2. Episiotomy and Repair (With motion pictures)

Second Meeting—April 19—Friday—Union Hospital
4:00-6:00 P. M. 1. Abortion and Ectopic Pregnancy
2. Postpartum Hemorrhage (With motion pictures)
7:00-9:00 P. M. 1. Placenta Previa and Abruptio Placenta
2. Medical Complications of Pregnancy

Third Meeting—Apr. 26—Friday—St. Anthony Hospital
4:00-6:00 P. M. 1. Posterior Positions
2. Breech Delivery (With motion pictures)
7:00-9:00 P. M. 1. Indications for the Use of Forceps
2. Forceps (With motion pictures)

Fourth Meeting—May 3—Friday—St. Anthony Hospital
4:00-6:00 P. M. 1. Puerperal Infection
2. Cesarean Section (With motion pictures)
7:00-9:00 P. M. 1. The Toxemias of Pregnancy
2. Eclampsia (With motion pictures)

These extramural postgraduate courses are being conducted by Dr. Carl P. Huber, Resident Adviser and Research Director in Obstetrics and Gynocology of Indiana University School of Medicine, and Director of Postgraduate Education in Obstetrics of the Indiana State Board of Health. Arrangements as to the place of the meetings, printing of

the programs, plans for the dinner session, and publicity, are handled by members of the society sponsoring the course.

The object of this extramural plan of postgraduate education is to reach the greatest number of physicians possible, and to bring them a postgraduate course which compares favorably with the instruction they would receive in a recognized medical center in the same period of time, but without the loss of time and income from practice occasioned by leaving their own communities. It has been authoritatively said that a practitioner with average training may practice five years without having contact with a medical center and still acquire new methods; after ten years it is more difficult; and after fifteen years it is almost impossible to keep in step with the progress of medicine without this contact.

Further expansion of this type of education is planned for the fall, as other county societies have signified their intentions of holding postgraduate courses in their communities, namely, Montgomery, Tippecanoe, Howard, Jasper-Newton, Saint Joseph, and Allen counties.

Concurrently, the intramural two-weeks intensified postgraduate courses in obstetrics will continue to be held at the Indiana University Medical Center. The postgraduate students reside at the Coleman Hospital, Indianapolis. The last of the present series of courses will start on Monday, June 3. A few vacancies exist in this course, and any interested physicians are urged to file their application at as early a date as possible.

LIABILITY OF TOWNSHIP TRUSTEE FOR MEDICAL CARE OF THE INDIGENT

ALBERT STUMP
Attorney for the Indiana State Medical Association

The following questions were submitted by Dr. H. C. Ragsdale of Bedford and were considered to be of sufficient general interest to warrant publishing the questions and answers.

1. Are the township trustees liable where they authorize the hospital bill but refuse to authorize the doctor bill?

The township trustee, as the overseer of the poor, is required to see that the poor are "taken care of in the manner required by law." With respect to medical care, the law reads:

"He shall, in cases of necessity, promptly provide medical and surgical attendance for all of the poor in his township who are not provided for in public institutions; and shall also see that such medicines and/or medical supplies and/or special diets and/or nursing as are prescribed by the physician or surgeon in attendance upon the poor are properly furnished." (Acts 1935, ch. 116, Sec. 5, p. 432.)

Burns 1939 Supplement, Section 52-148.

Under that statute it is the duty of the trustee to provide, in cases of necessity, medical and surgical attendance. The public institutions referred to are not hospitals except such hospitals as are intended for the care of indigents.

2. Are WPA workers with families of five or more earning incomes of $48.00 per month with no other sources of income entitled to emergency medical relief?

This question involves the definition of an indigent or poor person. There is no statutory definition of poor person as the term is used in the poor relief statutes. So it is necessary to look for the definition of that term in the decided cases. In Board of Commissioners of Warren County vs. Osburn, 4 Ind. App. 590, the court said that "poor person is the same as a pauper" or an indigent person. All these terms have been defined to mean those who may rightfully claim alms from the public bounty. Those who may rightfully claim public alms are not necessarily only those who are entirely destitute. The term "indigent" has been defined to mean one who is destitute of means of comfortable subsistence, and for that reason is needy or in want. Combining the various definitions and the various uses of the terms in statutes and in decisions into one statement, it seems to me that a poor person is one who is without the means of obtaining all the actual necessities of life and whose financial situation is such that he is unable to obtain credit for such necessities. This does not mean that he is not an indigent until he sinks to that financial level where he is unable to obtain any of his necessities. It means that whenever he is unable to obtain some one or more of the actual necessities of life, he is then an indigent and is entitled to claim public alms. Our statute seems to recognize by implication the accuracy of that definition, for it authorizes aid to a person and his family if he accepts employment and has wages coming in which are insufficient to pay for his necessities.

Burns 1939 Supplement, Section 52-152.

From this it follows that WPA workers with families of five or more would be entitled to medical relief whether there was an immediate emergency or not, since the statute requires that medical service be provided, not in cases of emergency alone, but "in cases of necessity."

3. Is a person considered indigent if he is given hospital but not medical aid by the trustee; or are people graded as to their amount of indigency?

The answer to the foregoing question applies here also. One is an indigent whether he has an income or not, so long as the income is not sufficient to supply his necessities. Under Section 52-152, above cited, public aid is extended to poor

persons in good health only where the "personal effort of the applicant fails to provide one or more of the following items of relief: Simple food necessary to sustain the person or family in a healthy physical condition, or light, or water, or fuel for cooking or heating purposes, but limited to necessity only, or such simple and ordinary clothing as is necessary for health and decency, or necessary shelter, or necessary household supplies and household necessities, the cost of which shall not exceed the lowest price available." But this applies only to persons in good health. Medical care is also recognized as a necessity. Section 52-148. Therefore, the poor person might be entitled to medical relief only just as he might be entitled to one or more of other items of relief.

4. Is it the duty of the trustee to furnish medical care to the indigent poor whether there is an emergency or not?

The trustee has that duty. If he refuses to do so, then the poor person may take an appeal from such refusal to the county commissioner who may direct the overseer to give such relief as they deem proper.

Where there is a medical emergency and it is impossible to contact the trustee before the medical services should be rendered, then the physician who renders such services is entitled to recovery from the proper township even though the trustee had not been contacted. But for those services which are not of an emergency character, the trustee should be contacted. Now, suppose the trustee refuses to supply the medical care even though the necessity exists. It is our opinion that the physician, after such refusal, may go ahead and perform the services and then would have the right to recover from the township. We base that conclusion upon a statement contained in *Whitlatch Clinic and Hospital vs. Carpenter,* 25 N. E. (2d) 263. The court said with respect to a situation where the physician communicated with the proper authorities,

> "but if the authorities be noncommittal, as is alleged in the complaint herein, then the necessary services may be rendered and the law imposes an obligation on the township to pay for such services."

In *Newcomer vs. Jefferson Township,* 181 Ind. 1, in referring to the conduct of a trustee in event the physician finds the trustee for the purpose of obtaining authorization to render medical services, the court said in the form of a rhetorical question:

> "Or, suppose he is found, and for reasons of his own, or because he thinks it unnecessary, refuses to employ aid, is it enough to say that the law will be satisfied by prosecuting him criminally for failure to discharge a plain statutory duty, even though a human life is sacrificed? * * * The law is just as mandatory that the relief shall be given at the expense of the township, as it is that the overseer shall provide it. It is therefore the law's mandate in such an emergency as is here shown, which raises an implied liability to one who renders such necessary and prompt service as is here shown, for the reasonable value of the service."

From these statements from the Appellate and Supreme courts of Indiana, we conclude that the physician as a matter of law could recover from the trustee where there existed an actual necessity for the services rendered, whether there was an emergency or not, if the trustee refused to authorize medical care. The test of the liability of the township would be the existence of necessity.

Necessities with respect to food and clothing are not confined strictly to what would barely keep one alive. The food must be such as to sustain the poor person in a healthy physical condition, and the clothing must be such as is necessary for health and decency. Applying the same measure to medical necessities, they would be such as are necessary to keep the patient in health. This would cover not only emergency but chronic and non-emergency cases.

While we have set out what we believe the strict requirements of the law are, it is our judgment that the results to be obtained can sometimes be worked out more satisfactorily through diplomacy and negotiations than through an attempt to enforce the strict provisions of the law.

CORRESPONDENCE

April 2, 1940

Dear Editor:

The Gibson County Medical Society has instructed me to write a letter to the Indiana State Medical Association, protesting against an article in the *American Magazine* for April, written by Dr. Hugh Cabot, formerly of The Mayo Clinic. The article is entitled, "Give the Patient a Break."

It was the concensus of opinion of the local society that this article was the most severe and unwarranted criticism of the medical profession in general and the general practicing physician in particular that ever has come to their attention.

It is amazing how conceited and how biased one individual's mind can become when he is not compelled to work for a living as the rest of us have to do.

We do not think Dr. Cabot is sincere in what he writes, and are forced to think that he has some ulterior motive which prompts him to express such serious accusations of the profession of which he is a part. He brings out such things as fee-splitting, unnecessary operations for financial gain, and charging many times what a service is worth.

Even a layman would hesitate to write on such subjects as did Dr. Cabot.

Last of all, the most crude remarks were made about the ability of the doctor in general practice to do anything but treat a cold or an abrasion of the skin.

I want to congratulate The Mayo Clinic for not having Dr. Cabot on their staff any longer.

You may use this letter as you desire, but I believe it should be brought before the Council for any action they may choose to take.

Your sincerely,

O. M. GRAVES, M.D., *Secretary*,
Gibson Countly Medical Society.

ELIZABETH DUNLAP DIES

To the Editor:

Miss Elizabeth Dunlap of Indianapolis died February 27, 1940, at her home, 1138 North Alabama Street, Indianapolis. Her death recalls the memory of her distinguished father, Dr. Livingston Dunlap, and also her distinguished brother, Dr. John Dunlap.

Dr. Livingston Dunlap was one of the prominent physicians in Indianapolis from about 1830 until 1860. He was at one time a member of the city council and it was he who secured an appropriation of $25,000 during his council service for the purpose of building a new city hospital. An epidemic of smallpox had occurred and this aroused the public to the need of the hospital. This was about 1855 or 1856. After the first building was erected, and this had absorbed the appropriation, the excitement following the epidemic had subsided and the council refused to make an appropriation to equip the building and to maintain its running expenses. It was this old building which stood empty until the beginning of the Civil War and was then taken over by the government and used as a government hospital with the addition of some frame cantonments. The government returned it to the city in 1865 and it was used as the old Indianapolis City Hospital until 1883-1884 when a new hospital was erected. Dr. Livingston Dunlap was a man of great prominence in the profession and in public affairs. In addition to being a member of the Council he had, about 1830, been the recorder of Marion County. His son, Dr. John Dunlap, a bachelor who died some thirty-five years ago, was the first man in Indiana to make an exclusive specialty of diseases of the nose and throat. After being a general practitioner, he began his special work about 1870. He was at one time demonstrator of anatomy in the old Indiana Medical College.

Miss Elizabeth Dunlap was the last surviving member of the immediate Dunlap family.

WILLIAM N. WISHARD, M.D.

PLEASE COMPLETE THE BLANK ON PAGE 268 AND MAIL IT TO THE M-DAY COMMITTEE

UNDER THE CAPITOL DOME

STATE EXPENSE FOR HEALTH AND SANITATION

During the last fiscal year, Indiana increased its expenditures for various health and sanitation activities by more than a fourth as compared with the preceding twelve-month period. The expenditures are analyzed in the annual statistical report which has just been completed by Pressly S. Sikes, statistician in the Division of Accounting and Statistics.

The report shows that the state government, the ninety-two counties, the 1,016 townships, the cities, and the incorporated towns spent a combined total of $8,008,010.13 for items listed under the general title of health and sanitation. This expenditure represented 4.17 per cent of the total governmental cost of $191,994,312.26, for the fiscal year 1938-1939, and a per capita expenditure (on basis of a population of 3,238,503) of $2.47. The total expenditure for health and sanitation during the preceding, the 1937-1938, fiscal year, was $6,326,598.03, which was $1,681,412.10 less than the amount spent for those purposes last fiscal year. The 1937-1938 expenditures were 3.61 per cent of the total governmental costs, which amounted to $175,126,724.04 for all units. The exact percentage increase made for health and sanitation for 1938-1939 over the preceding year was 26.58 per cent.

The health and sanitation expenses were the sixth highest of the cost groups, based upon government functions. Education, representing 36.49 per cent of the total; highways, streets, and bridges, representing 16.50 per cent; charities and correction, representing 20.25 per cent; general government, representing 10.93 per cent, and protection to life and property, representing 8.87 per cent, were all ahead of health and sanitation in the amounts of money support given them. Recreation, which represented 1.52 per cent, conservation and development of natural resources, representing 1.24 per cent, and miscellaneous expenditures, representing .03 per cent, represented smaller expenditures than health and sanitation.

The statistician's report showed that county hospitals were operated at a total cost of $2,045,883.68. (This figure included construction: Allen county, $25,664.55; Blackford county, $8,391.19; Daviess county, $863.63; Jay county, $4,816.52; Lake county $291,550.61, and Putnam county, $4,914.02.) The report showed hospital expenditures by thirty-four of the ninety-two counties.

Expenditures by the counties listed for health commissioners, nurses, and miscellaneous expenses for health and sanitation, totaled $433,758.08.

The cities of Indiana spent a grand total of $1,649,484.42 for sewage and garbage disposal, another $1,015,334.60 for hospitals and cemeteries (not including cemetery expenses of Goshen, Indianapolis, Kendallville, Rushville, and Shelbyville).

Thirty-three cities spent $1,321,979.23 for construction of various health facilities. The combined expenditures of cities for boards of health and public nursing were shown as $674,455.54.

Incorporated towns spent $256,222.88 as their total for health and sanitation. This amount was divided as follows: for salaries of health officers and expenses, $3,223.59; for garbage and sewage disposal, $48,126.70; for cemeteries, $22,863.56, and for construction of sewers and disposal plants, $182,009.03.

The report also contained a ten-year governmental expense table which showed that the average annual expenditures of all Indiana units for health and sanitation of the long period was $5,971,406.28. The peak was reached in the fiscal year of 1938-1939, with the next highest in 1936-1937 when the amount was $7,010,453.67, while the smallest expenditure for these purposes occurred in the fiscal year of 1933-1934 with a total of only $4,078,124.55. Throughout the period, health and sanitation remained sixth from the top in the amount of governmental expenses. The ten-year average of the state government for health and sanitation expenses was $416,253.31 a year; for the counties, $1,903,490.65; for the cities, $3,482,307.58; for the towns, $134,237.97, and for the townships, $35,116.74.

CARE OF INJURED INDIGENT

Our advanced civilization will not tolerate refusal to pay for the care of injured persons, the Indiana Appellate Court said in a ruling issued last month.

The statement occurred in a ruling in which the court reversed an Ohio county circuit court decision refusing the claim of the Whitlatch Clinic and Hospital, in Ripley county, against Randolph township, Ohio county, for treatment of two paupers found injured on a highway in Randolph township. The two persons were removed from the scene of the accident to the clinic for treatment. One died within a few hours; the other remained unconscious for twenty-two days. William Carpenter, the township trustee, refused to pay the clinic's claim for medical services, alleging the township was not liable. The Appellate Court ruled that the townships are liable for the care of all poor persons in the township, whether domiciled there or not. The fact that the trustee was not advised of the injury or condition of the persons until after they were removed from the township to the hospital did not relieve the township from liability, the Appellate Court ruled.

DR. ALLEN CHIEF SURGEON AT REFORMATORY

Dr. L. J. Allen, who has been assistant physician at the Indiana Reformatory since 1933, has been appointed chief surgeon by A. F. Miles, superintendent. He succeeds Dr. Elmer Kalal. Dr. Thomas J. Wilkin, who was formerly at the Richmond State Hospital, was selected to fill Dr. Allen's former post.

FORGED PRESCRIPTIONS

Dr. Verne K. Harvey, secretary of the Indiana State Board of Health, calls attention to a warning published in the April issue of the American Druggist which showed that physicians are sometimes being made innocent confederates of dope addicts and peddlers.

The current war in Europe is cutting down heavily on the narcotics supply in this country and law enforcement agencies are cracking down harder than ever, and the result is that dope peddlers and addicts are turning in desperation to every possible source of supply, especially the retail pharmacist.

One method employed by the addicts, described by the magazine as "comparatively easy to put across," is the forged prescription. Prescription blanks, it said, are easy to get, usually being lifted from a physician's desk. And it is surprising how perfect a Latin prescription an addict can write.

Dr. Harvey pointed out, however, that a prescription including a narcotics ingredient must bear the physician's narcotics registration number. Still, the addicts sometimes may be able to learn the number, or they may "get away" with a fictitious number at a drug store where the physician whose name is attached to the prescription happens to be unknown. Some physicians have their numbers on their regular prescription blanks.

Gene W. Ryan, narcotics inspector for the health department, said that approximately 550 narcotics prescriptions have been forged in the state.



Dr. Harvey

Dr. Verne K. Harvey, secretary of the Indiana State Board of Health, has been awarded the 1940 Indiana Junior Chamber of Commerce scroll of merit. The award, made for outstanding achievement in the field of health, was announced at the Jaycee banquet which closed the state convention at Bloomington on April 20. The scroll said: "The Indiana State Junior Chamber of Commerce 1940 award of merit to the Indiana State Board of Health in recognition of signal service to the health of the citizenry of Indiana through securing advanced legislation, promoting educational activities, and cooperating with the medical profession." The award is made by the Junior C. of C. each year to encourage governmental service.

MEDICAL ASSOCIATION FORESIGHT

At the last annual meeting of the Indiana State Medical Association, an M-Day committee was created to coordinate the efforts of the Association and the armed forces in case of a national emergency. The committee includes representatives of the medical, veterinary, dental, and nursing professions and in addition two regular army officers who are associated with the committee in an advisory capacity.

The committee has met and studied the problem with a view to laying definite plans for rendering the armed forces any assistance needed. It was found that, for the initial effort, the number of trained professional persons was sufficient but that if a maximum national effort were required, there would be a distinct shortage.

The regular army advisors recommended that the following steps be taken by the Association with a view to preparation for an emergency:

1. Encourage young professional personnel to accept commissions in the Reserve Corps.
2. Urge persons holding such commissions to prepare themselves for promotion to the next higher grade as promptly as possible.
3. Prepare and keep alive a card index file of all professional personnel in Indiana, showing the capacities and special aptitudes of each.
4. Get Medical Reserve Officers to talk to professional groups about national defense in general and mobilization in particular.

It is interesting to know that the nurses' association already has prepared its survey and has a very complete index and classified list of nurses. The other associations may learn much from a study of their index.

It is expected that every professional man in these groups will offer prompt and willing cooperation in helping complete the necessary surveys. The best method of cooperating is to complete the following questionnaire, carefully and in detail.

It should be remembered that 1/39 of additional national needs for personnel must come from Indiana; or 1/23 of the Fifth Corps needs must come from Indiana.

Please complete, clip out, and mail

TO: CHARLES R. BIRD, M.D., *Chairman*,
M-DAY COMMITTEE,
301 HUME-MANSUR BUILDING,
INDIANAPOLIS, INDIANA

1. Name..... 2. Age.....
3. Address.....
4. Physical condition..... 5. Specialty.....
6. What other branches of medicine are you especially prepared in?.....
7. Are you physically fit to perform any and all duties you may be called upon to perform in time of national emergency?.....
8. If your answer is negative to No. 7, what limited service could you perform?.....
9. Are you a member of the Medical Corps Reserve, U.S. Army?..... Indiana National Guard?..... Naval Medical Reserve?..... U. S. Public Health Service?.....
10. Any military training or experience?.....
11. In time of national emergency, what would you like most to do?.....
12. Do you believe your services would be most effective in The Army?..... The Navy?..... The Public Health Service?..... Red Cross?..... At Home?.....

Deaths

Lewis Payton, M.D., of Muncie, aged eighty-eight years, died April thirteenth. Dr. Payton graduated from the Curtis Physio-Medical Institute in Marion in 1883.

* * *

Floyd E. Radcliffe, M.D., of Bourbon, died March fifteenth, aged sixty-three years. A graduate of Indiana Medical College, Indianapolis, in 1898, he practiced first in Burket, then in Bourbon where he had been for thirty-eight years. He was a member of the Marshall County Medical Society, the Indiana State Medical Association, and the American Medical Association.

* * *

Harry B. Thomas, M.D., Bloomington physician and instructor in anatomy at Indiana University, died March tenth in an Indianapolis hospital. Dr. Thomas was fifty-four years old. He began his practice and his teaching career in Bloomington in 1929 following his graduation from Indiana University School of Medicine in 1928. He was a member of the Monroe County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

* * *

Charles E. Laughlin, M.D., Evansville, died March twenty-ninth, aged eighty-four years. For thirty years, Dr. Laughlin had been superintendent of the Evansville State Hospital, retiring in 1933. He was one of five Evansville physicians honored for fifty years of practice by the Vanderburgh County Medical Society in December, 1939.

Dr. Laughlin graduated from Miami Medical College, Cincinnati, in 1878, and at the time of his death was an honorary member of the Vanderburgh County Medical Society, the Indiana State Medical Association, and was a member of the American Medical Association.

* * *

W. Bert Siders, M.D., age sixty-four, physician and civic leader of Warsaw for twenty-five years, died March sixteenth. Dr. Siders had practiced medicine at Union Mills and Millersburg before going to Warsaw in 1915. In addition to his civic positions, Dr. Siders had served as county physician. He graduated from the University of Illinois College of Medicine, Chicago, in 1906, and was a member of the Kosciusko County Medical Society, the Indiana State Medical Association and the American Medical Association.

Richard B. Wetherill, M.D., of Lafayette, aged eighty-one, died March twenty-seventh. World traveler, historian, philanthropist, physician and surgeon, Dr. Wetherill was widely known in his community. He had been president of the Tippecanoe County Historical Association since its organization fifteen years ago; he was vice-president of the Indiana Historical Society. He was among the first to be permitted to look into the tomb of Tutankhamen in Egypt, before anything had been removed from the tomb. He had traveled to various parts of the world and some of the researches made on his trips have been published. His last work was the compilation of data on the first government-sanctioned mail flight; this article was published recently in the Indiana Magazine of History.

Dr. Wetherill was graduated from Jefferson Medical College in Pennsylvania in 1883 and for thirty years practiced in Lafayette, his native town. He retired in 1917 to serve as a lieutenant in the volunteer medical corps. He had served on the staff of the College of Physicians and Surgeons of Indianapolis and earlier had taught materia medica in the Purdue school of pharmacy, from which school he later received the honorary degree of doctor of laws.

Dr. Wetherill was an honorary member of the Tippecanoe County Medical Society, was a Fellow of the American Medical Association and of the American College of Surgeons. He had once served as health officer for Lafayette and Tippecanoe county.

* * *

John Akester, M.D., formerly of Chicago and recently of Hardinsburg, Indiana, died February twentieth after a long illness. Dr. Akester was seventy-three years old. He graduated from the Medical College of Indiana, Indianapolis, in 1893. He had retired from active practice.

PLAN TO BE IN INDIANAPOLIS
MAY 6-11 FOR THE
ANNUAL POSTGRADUATE
COURSE OF THE I. U. SCHOOL
OF MEDICINE
SEE COMPLETE PROGRAM
ON PAGE V

News Notes

Dr. A. H. Fender, of Worthington, and Miss Melba King, of North Vernon, were married April seventh in North Vernon.

Dr. Clancy Bassett, of Thorntown, has been appointed coroner for Boone County to fill the unexpired term of James P. Swiggett, who has resigned.

Dr. Vincent A. Lapenta, Italian consul in Indianapolis, recently was decorated as a Knight Commander of the Crown of Italy. He was guest of Honor, March seventeenth, at an Italian dinner when approximately one hundred persons attended.

Dr. J. A. Weckham, recently of Iowa City, Iowa, is now associated with the Caylor-Nickel clinic at Bluffton, where he specializes in roentgenology.

The North Manchester Kiwanis Club has awarded the "Star of Service," which is given annually for outstanding service to the community, to Dr. Ira E. Perry. Dr. Perry's portrait and citation will be added to the gallery of five other similarly honored North Manchester citizens.

Dr. Leonard C. Lund has rented the office of Dr. W. C. Sarber in Argos and has begun his practice there.

Dr. E. A. Spohn has purchased the office equipment of Dr. S. J. Rubley, of Logansport, and will continue his practice in the office occupied by Dr. Rubley, who has accepted a government position in Juneau, Alaska.

Dr. Douglas W. Price, of Nappanee, and Miss Helen Engledow, of Bloomington, were married March thirty-first in Bloomington.

Dr. Edward G. McArdle, of Fort Wayne, has been named to succeed his father, the late Dr. J. E. McArdle, as a member of the parochial school physicians' examining staff.

Dr. R. L. Sensenich, of South Bend, spoke on "Is Group Hospitalization Insurance Desirable?" before members of the Indianapolis Rotary Club, March twenty-sixth.

Dr. Anson G. Hurley, of Muncie, and Mrs. Willoughby Kuhner, of Muncie, were married in the Christ Church on the Circle in Indianapolis, March twenty-third.

Dr. W. K. Nance and Dr. Doris Hoffman (Mrs. Nance) have established offices in Lagrange in the offices formerly occupied by Dr. W. A. Van Nest. Dr. and Mrs. Nance had been practicing in Wolcottville.

Health exhibits which proved to be popular in Muncie last year have been resumed in the lobby of the Muncie Public Library. The present exhibits come from the Indiana State Board of Health and are sponsored by the Delaware-Blackford County Medical Society.

The new surgical and medical center building at Logansport State Hospital was formally opened February twenty-second. The building is the first of a series of four being constructed at the hospital at a cost of $1,154,000. The other three are expected to be complete by May twelfth, Hospital Day.

Dr. George B. Morris, of Bluffton, and Mrs. Edna M. Bickers, of Marion, were married April eighth.

Dr. Roger I. Lee, of Boston, has been elected president-elect of the American College of Physicians and Dr. James D. Bruce, of Michigan, has assumed the president's chair. The annual convention of the organization was held in Cleveland in April.

Dr. J. Neill Garber has opened an office at 811 Hume Mansur Building, Indianapolis, for the special practice of orthopedics.

Dr. A. M. Winklepleck of Rockville has been named to succeed Dr. Robert Staff as superintendent of the Smith-Esteb tuberculosis hospital in Richmond.

Dr. W. M. McGaughey of Greencastle has been appointed health officer for Putnam County to serve the unexpired term of Dr. William O'Brien who resigned recently.

Dr. J. L. Allen of Greenfield has been appointed chief physican at the Indiana Reformatory. Dr. Thomas J. Wilkin of Richmond has been named as Dr. Allen's assistant.

Dr. C. E. Stone has reopened his office at Bedford, Indiana, after a number of years of Army service. Dr. Stone specializes in ophthalmology and otolaryngology.

Alumni of Jefferson Medical College will hold a reunion banquet during the convention of the American Medical Association in New York City on Wednesday, June 12, at the Murray Hill Hotel on Park Avenue. Requests for reservations may be addressed to Dr. Thomas F. Duhigg, at the hotel, Park Avenue at 40th Street, New York City.

The United States Public Health Service is distributing a new booklet entitled "20 Questions on Gonorrhea." It was developed with the active assistance of officers and members of the Neisserian Medical Society, is written in layman's language, and will be valuable to the physician who wants to know how to tell the story of gonorrhea in non-technical terms. It could be a valuable aid to the physician to give to his patients. The booklet is illustrated with schematic anatomical drawings and is available from the Superintendent of Documents, Washington, D. C., for 5c per copy and with a 25 per cent reduction on orders of 100 or more.

According to newspaper account, the late Dr. Richard B. Wetherill of Lafayette left an estate valued at approximately $600,000. He bequeathed the Wetherill home together with his collection of oil paintings and curios to Tippecanoe county to be maintained as a museum, and also left $100,000 in trust for construction of a fireproof building containing an auditorium, contingent upon acceptance of the terms of the will. A $25,000 scholarship fund was bequeathed to Purdue University, and the Home hospital and St. Elizabeth hospitals in Lafayette each were given $5,000.

The pamphlet entitled "Safer Motherhood," which was prepared by the Bureau on Maternal and Child Health of the Indiana State Board of Health, has met with great favor and numerous physicians have made inquiry as to the cost of the pamphlets which they wish to distribute to their own patients. For the information of other physicians who may wish to obtain a supply of the pamphlets, they are obtainable from the Colortype Corporation, 433 North Capitol Avenue, Indianapolis, at a cost of $12 for 1,000 copies or $27.50 for 5,000 copies.

Through the cooperation of the Illinois State Department of Public Health, the Children's Bureau of the U. S. Department, and the Department of Gynecology and Obstetrics of the Chicago Lying-in Hospital, five to six weeks postgraduate courses in obstetrics are being offered to practitioners during the next several months. Interested physicians may communicate with the Postgraduate Course, Department of Obstetrics and Gynecology, 5845 Drexell Avenue, Chicago, Ill.

The United States Department of Agriculture through the Food and Drug Administration's bulletin for the press of March 25, 1940, mentions terminated actions involving drug products. Among these was included action against the Lafayette Pharmacal, Inc., and Bern B. Grubb, Lafayette, Indiana, for "Oralsulin," a remedy "bearing false and fraudulent therapeutic claims and false and misleading statements"; the product was below its professed standard and did not contain insulin. A fine of $50 was levied against the corporation and $25 against Bern B. Grubb.

A Venereal Disease Conference was held in Hurty Hall at the Indiana State Board of Health Building, Indianapolis, March 28 and 29, with 450 in attendance. Dr. George Bowman, chief of the Bureau of Venereal Diseases of the State Board of Health, reported a very fine meeting. Both physicians and nurses attended. The meeting opened at nine o'clock each morning and continued until five o'clock the first day and four o'clock the second day. Subjects included primary and secondary syphilis, congenital syphilis, central nervous system syphilis, laboratory interpretations, acute and chronic gonorrhea, vulvo-vaginitis, chancroidal infection, prophylaxis, lymphogranuloma inguinale, investigation and legal control measures, prenatal and premarital laws, and numerous moving picture presentations from the American Medical Association and the U.S. Public Health Service on related subjects.

WANTED: HISTORICAL PICTURES AND OBJECTS

The Museum Committee of the Indiana University School of Medicine will greatly appreciate the cooperation and assistance of the medical profession in acquiring articles of historic interest. It is especially desired to obtain all the old instruments and medical books of early date, and any item of historic value, whether instrumental or literary. For some years the Museum Committee has been collecting such articles. Recently a group picture of the faculty of the old College of Physicians and Surgeons (1873 to 1879) was acquired, and also a group of pictures of physicians prominent in Indiana during the last half of the nineteenth century, in which group was included the picture of Mrs. Burnworth who was the patient upon whom Dr. Bobbs did the first operation for gall stones. In addition, there is a picture of the last clinic of Dr. Joseph Marsee, former eminent surgeon and professor of surgery in the Medical College of Indiana, and dean of the faculty of that school. The picture was taken at the old St. Vincent's Hospital, South and Delaware Streets, only a few days before Dr. Marsee's death. A pair of pill bags, used for many years in the latter part of the last century in the country practice of one of the charter members of the Indiana State Medical Association is one item of the collection.

Other similar articles of historic value will be greatly appreciated. Address Museum Committee, I. U. School of Medicine, 1040 West Michigan Street, Indianapolis.

The American Board of Obstetrics and Gynecology will conduct general oral and pathological examinations (Part II) for all candidates (Groups A and B) at Atlantic City, June 7 to June 10, prior to the annual meeting of the A.M.A. in New York City. The annual dinner of the Board will be held in New York City on Wednesday evening, June twelfth, at the Hotel McAlpin. For further information, address Dr. Paul Titus, secretary, 1015 Highland Building, Pittsburgh, Pennsylvania.

The annual St. Louis Clinics present a pretentious program for May 13-16, with all sessions to be held in the St. Louis Medical Society building. A registration fee of ten dollars will be charged, including luncheons for the three-day session. A feature of these meetings that probably will appeal to many physicians is the Medico-Military symposium on Monday, the opening day. It would seem that a lot of war medicine is crowded into this twelve hour period, practically all the speakers being commissioned officers in the Army medical corps. Registration is open to all members of organized medicine and applicants are directed to address Grayson Carroll, secretary, at the society building.

MENTAL HYGIENE GROUP TO MEET

The Indiana Society for Mental Hygiene will hold its first meeting since 1936 at the Claypool Hotel in Indianapolis, May 17 and 18. Dr. Max A. Bahr is scheduled to open the convention with a talk reviewing the accomplishments of mental hygiene in Indiana. Other speakers will include Judge Wilfred Bradshaw, Mr. Thurman Gottschalk, director of state institutions, Rev. E. B. Backus and Rev. A. E. Sharp, both of Indianapolis, Dr. Frank B. Knight, of Lafayette, Dr. Harriet E. O'Shea, of Purdue, Dr. Robert H. Haskell, of the Wayne County Training School in Michigan, and Dr. Franz Alexander, of Chicago.

ANNUAL MEETING OF INDUSTRIAL PHYSICIANS IN JUNE

The twenty-fifth annual meeting of the American Association of Industrial Physicians and Surgeons, together with the first annual meeting of the American Industrial Hygiene Association, will be held at the Hotel Pennsylvania, New York City, June 4 to 7, 1940. The convention will be devoted to the problems of industrial health with particular stress on prevention and control of occupational hazards. The dinner meeting on Thursday evening, June sixth, will be the occasion of the presentation of the William S. Knudsen award for the year of 1939-1940. Members of the medical profession are invited to attend the meetings. The executive secretary of the organization is Mr. Armour G. Park, 540 North Michigan Avenue, Chicago.

NEW OFFICERS ELECTED FOR INDIANA ACADEMY

Approximately seventy-five members of the Indiana Academy of Ophthalmology and Otolaryngology attended the twenty-fourth annual session of the organization in Richmond, April third. Officers were elected as follows:

President, Fred McK. Ruby, Union City.

Vice-president, Noel McBride, Terre Haute.

Second vice-president, W. W. Holmes, Logansport.

Secretary-treasurer, E. W. Dyar, Indianapolis.

Drs. E. E. Holland, of Richmond, E. C. Davis, of Muncie, C. P. Clark, of Indianapolis, and C. A. Robinson, of Frankfort, were re-elected as council members and M. W. Manion, of Indianapolis, and M. G. Erehart, of Huntington, were elected to complete the council. Plans were made to hold the 1941 meeting at French Lick early in April.

INDIANA HOSPITALS HONOR NATIONAL HEROINE

A feature of the statewide observance of National Hospital Day will be the dedication on Saturday, May 11, of the monument erected at the grave of Jane Todd Crawford in Johnson cemetery, at Sullivan, Indiana. The meeting will begin at eleven o'clock at the Sullivan Methodist Church. At noon a luncheon will be served at the church and at two o'clock a caravan will form and go to the cemetery where the dedication will take place. Reservations for luncheon must be mailed to Mrs. Hazel Millard, Mary Sherman Hospital, Sullivan.

The inscription on the monument is as follows:

"Jane Todd Crawford born in Rockbridge County, Virginia, December 23, 1763, married Thomas Crawford January 5, 1794, settled in Green County, Kentucky, November 5, 1805, suffering from an ovarian tumor and realizing that her only hope was a surgical operation, frankly experimental, this heroine, though in great pain, rode fifty miles horseback over rough trails to the home of Dr. Ephraim McDowell at Danville, Kentucky, where on December 25, 1809, antedating anesthesia, she submitted to the first ovariotomy and thus became the pioneer patient in abdominal surgery. Restored to health, she lived for thirty-two years.

"Erected by the Indiana Hospital Association, Section of the American Hospital Association, National Hospital Day, May 12, 1940."

Plan to go to Sullivan for this national event. Sullivan is located on U.S. highway number 41, and is 25 miles south of Terre Haute. And remember that May is a good month to enjoy scenic southern Indiana. Extend your trip from Sullivan to Vincennes, the city that was ruled under three flags; to New Harmony, the city where Father Rapp and the Owenites made early history; and to the village at Rockport and the grave of Nancy Hanks Lincoln. Also the state parks at Spring Mill, Turkey Run, and Brown County will be open for you to enjoy.

INDIANA UNIVERSITY NEWS NOTES

I.U. POSTGRADUATE COURSES

The first of a series of postgraduate courses giving Indiana practicing physicians an opportunity to study latest developments in the treatment and care of children was held at the Indiana University School of Medicine, Wednesday, March 20.

The course, sponsored by the postgraduate education committee of the medical school, was open to all physicians in the state. Three additional one-day courses were given the succeeding three Wednesdays. The pediatrics course was one of three to be held by the medical course this spring. A course in otorhinolaryngology was held April 15-27, inclusively, and the general postgraduate course held each spring will be given the week of May 6.

Discussions, lectures and clinics in the first of the pediatrics section centered around problems attending newborn infants. Afternoon discussions and demonstrations dealt with asphyxia, bleeding disorders and anemia, early feeding and premature births. Evening discussions were on the subject, "Behavior Aspects of Illness."

The course March 27 was on "Respiratory Tract Infections" and "Eye Disorders in Children." Sessions April 3 were on "Gastrointestinal Disorders" and "Common Skin Diseases in Children"; and the April 10 sessions were on "Contagious Diseases" and "Genito-Urinary Problems as Found in Children."

Facilities of Riley Hospital for Children, Long General Hospital and William H. Coleman Hospital were used in the courses.

SERUM CENTER TO BE ESTABLISHED

Dr. W. D. Gatch, dean of the Indiana University school of medicine, has announced his approval of the acceptance of funds offered by the Variety Club of Indianapolis for establishment of a convalescent serum center on the Indiana University Medical Center campus, for use of the center and physicians throughout Indiana needing such serum service.

The serum depot will be the first to be established in Indiana on any extensive scale, it was said, and will be developed as rapidly as possible to meet the requirements of Indiana members of the medical profession.

"In general," Dean Gatch said, "a convalescent serum depot will provide a central service in Indiana where physicians needing serum for the treatment of a number of well known diseases, such as measles, scarlet fever and infantile paralysis, can be assured of prompt and reliable service in fulfilling their requirements of fighting these and other diseases.

"Even more important will be the provision of service for counteracting such dangerous infections as peritonitis and for the treatment of dangerous burns. Here the need for the service will often be more urgent than in the general run of the more commonly known ailments.

"At present Indiana physicians needing serums must send to out-state stations, the closest being Chicago, where the Michael Reese Hospital has maintained a serum center for a number of years."

Dr. Gatch appointed Dr. Matthew Winters, chairman of the medical school department of pediatrics, as head of a committee to supervise the establishment of the center. Dr. Winters will announce the names of other members of the committee soon.

ANNUAL COURSE IN OTORHINOLARYNGOLOGY

Ear, nose and throat specialists from 16 states were in Indianapolis April 15-27 to attend a two weeks' postgraduate course at the Indiana University school of medicine. Physicians registering in the course were guests at a dinner at the Indianapolis Athletic Club the night preceding the opening of the course. The Indianapolis Opthalmological and Otolaryngological Society gave the dinner. Dr. C. H. McCaskey, chairman of the Indiana University medical school department of otorhinolaryngology, presided.

Speakers were Dr. B. D. Myers, dean of the school of medicine at Bloomington; Dr. C. W. Rutherford, president of the society; Dr. W. D. Gatch, dean of the school of medicine in Indianapolis; Dr. F. McK. Ruby, president of the Indiana Academy of Ophthalmology and Otolaryngology; Dr. B. A. Moore, president of the Indianapolis Medical Society; Dr. Karl R. Ruddell, president of the Indiana State Medical Association, and Dr. William L. Benedict, Mayo Clinic, who spoke on "Diseases of the Paranasal Sinuses and Ear With Ocular Infections."

The postgraduate course, started a number of years ago as a seminar for local physicians by Dr. John F. Barnhill, but later expanding to attract specialists from states in all parts of the nation, covered a wide range of subjects in the care and treatment of diseases of the ear, nose and throat. Registrants in the 1940 course included physicians from Washington in the West, Louisiana and Texas in the South and West, New Jersey in the East, and Michigan and Nebraska in the North and Northwest.

This was the twentieth anniversary of the anatomical and clinical course in otorhinolaryngology. The 1940 class was composed of twenty-five students. The course is under the direction of Dr. C. H. McCaskey, chairman of the department, with Dr. E. N. Kime in charge of the anatomical part of the course and Dr. Clyde Culbertson instructor in pathology.

SOCIETIES AND INSTITUTIONS

THE INDIANA STATE MEDICAL ASSOCIATION

Executive Committee

March 31, 1940.

Roll call showed the following present: C. A. Nafe, M.D., chairman; C. H. McCaskey, M.D.; K. R. Ruddell, M.D.; A. M. Mitchell, M.D.; M. A. Austin, M.D.; A. F. Weyerbacher, M.D.; Albert Stump, attorney, and T. A. Hendricks, executive secretary.

Luncheon guests: T. M. Overley, manager, Indianapolis Better Business Bureau; E. O. Asher, M.D., chairman, State Board of Health Liaison Committee to Deal with Social Security Act; H. B. Mettel, M.D., chief, Bureau of Maternal and Child Health, State Board of Health.

Minutes of the meeting of February 4, 1940, approved upon the motion of Dr. McCaskey, seconded by Dr. Mitchell.

Membership Report

	1939	1940	Gain 1940
Number of members March 31	2825	2874 (89 hons.)	49
Number of members December 31, 1939	3145		

The statements of Receipts and Expenditures for February for THE JOURNAL and the Association committees were approved.

Treasurer's Office

The treasurer reported that $3,000 worth of United States Savings bonds had been purchased for the medical defense fund.

The committee authorized the purchase of a check protector upon the motion of Dr. Mitchell, seconded by Dr. Austin, and authorized Dr. Weyerbacher to make the selection.

Report from the Metropolitan Trust Company on Beachton Court bonds received by the committee. From time to time payments upon these bonds are being received by the association.

1940 Annual Session at French Lick

Dr. E. M. VanBuskirk, member of the State Board of Health, is to report to the committee at its next meeting as to whether or not the health officers will hold their annual meeting on Monday, October 28, preceding the opening of the annual session of the State association.

Commercial exhibit. 24 spaces sold; 10 to be sold.

Scientific program. All but two places filled on the scientific program.

Selection of the banquet speaker to be made by Dr. Ruddell, president of the association.

Last meeting of House of Delegates. Suggestion made that the breakfast meeting of the House of Delegates be eliminated and that the last meeting be a luncheon meeting held on the final day of the meeting. This suggestion is made because of the complaint made by the scientific program committee that only a few were on hand to hear the first papers on the scientific program on the last day of the meeting last year and in previous years due to the fact that the House of Delegates was in session at the time scheduled for the scientific meeting to start.

Legislative, Legal and Social Security Matters National

Wagner hospital bill. American Medical Association representatives appear before Senate Committee to discuss the President's plan for the construction of fifty hospitals throughout the country in areas where need for such institutions is shown. This plan seems to have succeeded the Wagner bill.

Hospital article. The article by Dr. Sam Kennedy concerning hospitalization was discussed at the meeting and the committee suggested that Dr. Kennedy meet with the Indianapolis members of the Executive Committee and discuss this article with them if he desires the secretary of the association to present his article for publication in the newspapers.

Chiropractic bill in Congress. Information received from the American Medical Association in regard to the introduction of a chiropractic bill in Congress. This has been turned over to the legislative committee for action.

Epstein-Capper alliance. Article from the New York *Times* in regard to the fact that Senator Capper will sponsor the Abraham Epstein bill brought to the attention of the committee.

Hugh Cabot's article. Article by Hugh Cabot that appeared in the American Magazine, advocating a national health insurance plan, discussed by the committee. The committee feels that probably Dr. Cabot has had some influence upon Senator Lodge of Massachusetts which caused Senator Lodge to introduce his health insurance measure. Comments in regard to the Cabot article carried in the April issue of THE JOURNAL of the Indiana State Medical Association, both in the editorial section and on the president's page.

A.M.A. court case. Albert Stump discussed the decision of the United States Court of Appeals in regard to the A.M.A. case. Mr. Stump feels that if the courts hold against the A.M.A. it will have a far-reaching effect upon the present type of medical organization.

Back-door health insurance. Editorial in New York *Times* brought to the attention of the committee. This editorial states that by amending the present state unemployment insurance law in New York State so any employee who "becomes sick shall not be prevented from obtaining benefits due to inability to accept employment" would in effect turn the state unemployment insurance act into a health insurance act. The editorial continues, "The question raised is whether we want to introduce health insurance in this State without proper study, in an offhand manner, through the back door. . . . The subject is one which we should act upon only after the most careful preliminary study, preferably by an expert commission." This is interesting as the

New York *Times* has advocated some change in the present practice of medicine and has suggested that some form of health insurance might be forthcoming.

Local

Should physicians become members of labor unions? The committee's attention was called to the fact that one county medical society is contemplating affiliating with the American Federation of Labor. The society has requested information as to how this would affect its standing with organized medicine. The attorney for the association is to write his opinion to the society in regard to this matter.

May primary. Cultists have filed candidates from several counties for the legislature.

Poison law. Special committee has been appointed by the Indiana Inter-Professional Health Council to draft a barbiturate bill. Dr. Beatty was authorized to act as representative of the state association upon this committee.

State Board of Health

Standardization of laboratories. Report made to the committee in regard to the procedures used by the State Board of Health to make sure that laboratories making the tests under the new marriage law come up to certain standards.

New marriage law. Several societies have set fees for making these examinations. The general fee seems to be $3.00.

Complaint against maternity home regulation. Dr. Mitchell presented a complaint from the Vigo County Medical Society to the committee in regard to the regulations that have been established by the State Department of Public Welfare in regard to maternity homes. These rules were drawn up in accordance with a law which was passed some thirty years ago and were drawn up by a committee headed by Dr. E. O. Asher, chairman of the State Board of Health Liaison Committee to Deal with Social Security Act. Dr. Asher explained that these regulations were set up as a model and that local conditions would be taken into consideration in their enforcement. A suggestion was made that Dr. Asher be invited to attend a future meeting of the Vigo County Medical Society and explain the situation.

Group Hospitalization

"Indiana Plan" promoted by Indiana Travelers Assurance Company. The advertisement of the Indiana Travelers Assurance Company, telling of their "Indiana Plan," was approved for THE JOURNAL. Investigation has shown that this company used the phrase, "Indiana Plan," before it was used by the Indiana State Medical Association.

The committee understands that conflicts are arising between the American Hospital Association and the radiologists in regard to the classification of radiological services. Apparently the hospitals maintain that such services are hospital services while the radiologists maintain that such services are medical services and as such should not be included in group hospitalization programs. The radiologists maintain that although the hospitals at the present time are making inroads into only radiological, anesthesia and pathological fields, it will be only a matter of time until they hire the surgeons and the physicians on a salary basis and take over the entire practice of medicine, with the hospitals as a center.

A folder from the United Mutual Life Assurance Company of America, Wilmington, Delaware, brought to the attention of the committee. This company writes a hospital and medical service plan.

Postgraduate

Indiana University course to be held May 6 to 11, 1940.

District society meetings:

Twelfth	District	April 2, 1940, Fort Wayne
Fourth	"	May 8, 1940, Seymour
Fifth	"	May 10, 1940, Terre Haute
Sixth	"	May 15, 1940, Brookville
Eleventh	"	May 15, 1940, Huntington
Ninth	"	May 16, 1940, Attica
First	"	May 23, 1940, Evansville
Tenth	"	May 23, 1940, Hammond
Third	"	May —, 1940, New Albany
Second	"	June 6, 1940, Sullivan

Seventh, Eighth and Thirteenth District meeting dates not yet set.

Committee on Medical Education and Hospitals. Dr. Herman Baker, chairman of the committee, says that he intends to call a meeting of his committee soon.

Some discussion has arisen as to whether or not a tuition should be charged for postgraduate courses. The committee felt that this is a matter which should be left up to the Committee on Medical Education and Hospitals to settle.

Medical Economics

Government competition. Letter received from John H. Nelson, an attorney in Washington, requesting information in regard to Government competition, federal and local, with the practice of medicine. The committee felt that this letter could be answered better by the American Medical Association and hence the letter is to be forwarded to Dr. R. G. Leland, director of the Bureau of Medical Economics of the American Medical Association.

Notice brought to the attention of the committee that a round table discussion is to be held by the Governor's Advisory Health Council in regard to "The Functions and Duties of a Medical Social Worker in a Medical Care Program" upon April 11. Most of the officers of the association will attend this meeting although the secretary will not be able to be there because of a previous engagement to address the Woman's Auxiliary to the Lake County Medical Society in Hammond that same date.

Medical Relief

The committee was informed of the questionnaire that was sent out by the Township Trustees Association in regard to the medical relief situation in

various townships. It is understood that after the trustees' association receives sufficient answers to this questionnaire and the data is compiled from them, a meeting of the state association Medical Relief Committee is to be held with the township trustees committee.

Questions on Medical Relief. Questions in regard to the legal responsibility of township trustees in certain relief cases, contained in a letter received from Dr. H. C. Ragsdale, of Bedford, chairman of the Committee on Indigent Relief of the Lawrence County Medical Society, brought to the attention of the Executive Committee. These questions were of such general interest that the committee authorized the publication in the May issue of THE JOURNAL of the questions and their answers by Mr. Stump.

Letter from Dr. J. S. Leffel, chairman of the Medical Relief Committee of the state association, to Dr. Ragsdale, brought to the attention of the committee. The committee complimented Dr. Leffel most highly upon the sound manner in which he and his committee are approaching this difficult question of medical relief.

WPA reports. Monthly reports from WPA for January and February brought to the attention of the committee.

Farm Security Administration

Letter from Mr. John S. Wright of Eli Lilly and Company in regard to the Farm Security Administration brought to the attention of the committee. Mr. Wright says in his letter: "In certain sections of the country it has not worked out very well and is temporarily discontinued. The plan, however, contemplates the cooperation of organized medicine and permits choice of physician by patient. Compensation is not adequate for either the physician, druggist, or other branches of medicine participating."

Sickness Insurance and Socialized Medicine

Copies of a letter received by an Indianapolis physician in regard to the English panel system were distributed to the members of the committee.

U. S. Pharmacopoeial Convention

Dr. Samuel Kennedy and Dr. W. B. Challman have accepted their positions as representatives of the Indiana State Medical Association to the pharmacopoeial convention.

Woman's Auxiliary

Thirteen new auxiliaries have been organized since December. Previous to this time only twelve auxiliaries had been organized since this organization was started in this state some ten years ago.

National Physicians' Committee

Letter read from Warrick county stating that the county medical society had voted $10.00 per member to the National Physicians' Committee. Report received that the Gibson County Medical Society has donated $25.00 to this organization.

Criticism by Dr. John P. Peters brought to the attention of the Executive Committee.

Letter received from John M. Pratt asking that a speaker from the National Physicians' Committee be placed upon the state program. This matter was discussed and a suggestion made that instead of having a speaker on the general program, perhaps Dr. Irvin Abell could speak ten minutes upon behalf of the Committee at the House of Delegates' meeting. Formal action by the committee in this matter was held over until the next meeting.

Examination and Cult Study Committee State Board of Medical Registration and

Case against Dr. Charles F. Kaadt of South Whitley. Committee informed that Dr. Kaadt of South Whitley, notorious diabetic "quack," had been granted a new trial by Federal Judge Thomas W. Slick.

Annual registration. Letter received from Dr. E. M. Shanklin supporting annual registration of physicians.

Meeting of Committee on Control of Cancer

The Committee on Control of Cancer held a meeting with representatives of the Women's Field Army at the Claypool Hotel at the same time as the Executive Committee met. Dr. Mitchell, president-elect, and the secretary of the association were instructed to attend that meeting as representatives of the Executive Committee.

American Medical Association Meeting, June 10 to 14, 1940, New York

The committee was informed that official notice of the A.M.A. meeting in New York June 10 to 14 had been received and that the House of Delegates will convene Monday, June 10.

"Indiana Plan" of Preventive Medicine

The committee was informed that the "Indiana Plan" had been adopted by the Michigan State Medical Society.

The committee was informed that an attack had been made on the American Legion for its adoption of the "Indiana Plan" by the National Health Foundation of Minneapolis. The National Health Foundation criticises the Legion for accepting the principles of immunization and vaccination laid down in the plan. Copies of the attack were to be sent to the officers of the American Medical Association and the United States Public Health Service, and an answer sent to the American Legion when facts concerning the foundation are obtained.

Malpractice

The committee discussed the folder advertising "complete coverage" which is distributed by the Medical Protective Company and a letter from the American Medical Association in regard to this advertising.

The committee also discussed the variation of malpractice insurance costs which range from $20.00 to $80.00 for one specialty alone.

A letter from Wisconsin discussing the malpractice insurance situation in that state brought to the attention of the committee. The secretary was instructed to write the various insurance companies asking for sample policies that are now in force.

THE BUREAU OF PUBLICITY

December 6, 1939.

Present: W. N. Wishard, M.D., chairman; F. M. Gastineau, M.D.; C. F. Thompson, M.D., and T. A. Hendricks, executive secretary.

The release, "Holiday Health Hints," approved for publication in Monday, December 18, papers.

Reports on medical meetings:

Sept. 13—Sullivan County Medical Society, Sullivan, Ind. "Syphilis." (18 present.)

Sept. 28—Dearborn-Ohio County Medical Society, Aurora, Ind. "Indiana's Convicted Criminals." (20 present.)

The House of Delegates, at the ninetieth annual session at Fort Wayne in October, approved and commended the work of the Bureau of Publicity. The attention of the Bureau was called to the fact that the suggestion was made by the delegate from Lawrence county to the state meeting that Doctor James B. Maple of Sullivan, necrologist and historian of the state association, "be given opportunity to bring Dr. Kemper's medical history up-to-date." This suggestion received the unanimous approval of the House of Delegates.

Letters received from the Indiana Hospital Association concerning the marking of Jane Todd Crawford's grave discussed by the Bureau. This matter was referred to the chairman of the Bureau for final disposition. The chairman reported that arrangements were being made for the placing of a bronze tablet at the Indiana University Medical Center commemorating the four medical pioneers of Indiana.

Letters received from the state program chairman of the Woman's Auxiliary to the Indiana State Medical Association suggesting a series of living pictures on medical subjects for use in the schools brought to the attention of the Bureau. This communication was referred to the chairman of the Bureau for study and a report at the next meeting of the Bureau. Other communications from the president of the Woman's Auxiliary which had been brought to the attention of the Bureau of Publicity were formally approved by the Bureau.

Question concerning the ethics of sending out announcements in regard to the opening of a new office brought to the attention of the Bureau of Publicity. A letter received from the American Medical Association concerning this subject follows:

"I take great pleasure in enclosing a copy of the Principles of Medical Ethics. You will find on pages 7 and 8 the section pertaining to advertising, professional announcements, etc. You will observe that in the matter of professional announcements much is left to local custom, and I respectfully suggest, therefore, that you ascertain what may be the policy of your own component county medical society with respect to the distribution of announcement cards and other phases of this general subject.

"You know, of course, that the Principles of Medical Ethics specifically declare that the solicitation of patients by any means is unprofessional. It is my purely personal opinion that in view of that declaration in the Principles of Medical Ethics it is not at all desirable that a physician send announcement cards to members of the lay public. It is also my purely personal opinion that it is not desirable for a physician to send to laymen statements pertaining to special courses of training that the physician may have had. My observation has been to the effect that this procedure on the part of thoroughly competent physicians has in a number of instances led to a distribution of circulatory statements of one kind or another by men who have been licensed to practice medicine but who have not enjoyed any unusual advantages and who, perhaps, have not definitely established themselves as thoroughly competent physicians.

"Please understand that the opinions herein expressed are purely personal opinions."

The Bureau is to prepare a formal statement expressing its opinion concerning such announcements in the same manner in which it has rendered official opinions concerning the use of neon signs by physicians and the use of the radio by physicians.

The Bureau of Publicity authorized the reprinting of the pamphlet, "Information Concerning the Prevention of Contagious Diseases." Copies of this pamphlet in its present form are to be sent to the officers of the Indiana Pediatric Society, to the director of the Bureau of Maternal and Child Health, and to the members of the Liaison Committee of the State Board of Health to Deal with the Social Security Act, asking them to make any changes and corrections in order to bring the pamphlet up-to-date, as the Bureau desires to have it reprinted.

A copy of the index to the Transactions of the Indiana State Medical Society from its beginning in 1849 to 1907 prepared by G. W. H. Kemper, M.D., of Muncie, Indiana, was received by the Bureau of Publicity from an Indianapolis physician. The Bureau wishes to express its appreciation for this index which will be kept on file at the headquarters office.

Report made that the chairman of the Bureau of Publicity is compiling a book of photographs containing the sketches of early physicians of Indianapolis and the pictures and short biography of each of the presidents of the Indianapolis Medical Society. A short sketch giving the history of the Indianapolis (Marion County) Medical Society is also included. This book will be completed and formally presented to the Indianapolis Medical Society within the next few weeks.

The Bureau discussed the new eight-point platform adopted by the American Medical Association and a member of the Bureau was assigned the duty of outlining a plan whereby the eight points may be applied here in Indiana.

February 21, 1940.

Present: W. N. Wishard, M.D., chairman; F. M. Gastineau, M.D.; C. F. Thompson, M.D., and T. A. Hendricks, executive secretary.

The following releases had previously been approved for publication by the Bureau:

January 26, 1940—"National Social Hygiene Day."

February 15, 1940—"Speed is Essential in Pneumonia Battle."

Reports on medical meetings:

Nov. 22, 1939—Clay County Medical Society, Brazil, Ind. "Prophylaxis against Venereal Disease." (25 present.)

Dec. 6, 1939—Shelby County Medical Society, Shelbyville, Ind. "Diagnosis and Psycho-neurosis." (18 present.)

Dec. 20, 1939—Parke-Vermillion County Medical Society, Clinton. "Some Clinical Aspects of Heart Disease." (16 present.)

The Bureau approved the preparation of a series of articles upon "The Ten Killers." The first is to be a series of four articles upon the great killer, "Heart Disease," as follows:

(1) General article on heart disease.
(2) Heart disease of children, prevention and care.
(3) The heart and the laboring man.
(4) The heart and the business man.

The Bureau felt it would be well to assign these various subjects to certain heart specialists and ask their cooperation in the preparation of these articles. It is the idea of the Bureau to use the same method of having specialists in the various fields cooperate with the Bureau in preparing the entire "Ten Killer" series of newspaper articles.

Report made that the Marshall County Medical Society had appointed a committee on publicity and had "already contacted the papers of the county and they have consented to publish weekly articles that will be of interest to their readers." The Bureau expresses its appreciation to the Marshall County Medical Society for this work that it has undertaken and re-emphasizes the fact that such articles should be informative, simple in language, and completely devoid of personal publicity.

Communication from the Executive Committee suggesting that the Bureau of Publicity of the Indiana State Medical Association "make available to county medical societies a group of trained lay platform speakers on the subject of 'Socialized Medicine,' who will appear upon the call of any local medical society before lay meetings" received by the Bureau. The expenses for such speakers are to be borne by the state medical association according to the communication, and the Bureau is asked to "notify the county medical societies of the availability of these speakers to talk before luncheon clubs, chambers of commerce, and at lay meetings under the sponsorship of the local medical society." The Bureau discussed this request of the Executive Committee at length and it is of the opinion that in the light of past experience such a suggestion is not wholly sound and therefore the Bureau is not in favor of such action.

A rough sketch of the plaque that is to honor Indiana medical heroes brought to the attention of the Bureau. A final sketch with the copy is to be presented at the next meeting of the Bureau.

Report is to be made at the next meeting upon the local survey concerning "The Choice and Change of Doctors."

The advertisement prepared by the Lake County Medical Society entitled, "Face Tomorrow Without Worry," which appeared in The Gary Post-Tribune of February 12 brought to the attention of the Bureau of Publicity and the Bureau wholeheartedly approved the advertisement. It was the opinion of the Bureau that the wording of this advertisement and this method of educating the public as to the services which are rendered by the Lake County Medical Society are most acceptable.

Some time ago the Bureau approved the reprinting of the pamphlet entitled, "Information Regarding the Prevention of Contagious Diseases," which was distributed several years ago by the Bureau. The Bureau feels, however, that this pamphlet should be gone over carefully and should be brought up to date. It is suggested that it be placed in the hands of a pediatrician for his suggestions as to how the pamphlet should be changed.

TWELFTH DISTRICT MEDICAL SOCIETY

April 2, 1940, marked the annual meeting of the Twelfth District Medical Society. All sessions were held at the Chamber of Commerce in Fort Wayne. District president, Dr. C. C. Rayl of Decatur, presided.

Registration totaled 118, the largest in the past several years.

Motion pictures of the Blood Bank—Cook County Hospital were shown; also films pertaining to "Colles Fracture" and "Operations for Hydrocele" were viewed.

Dr. T. T. Stone, of Chicago, a member of the faculty of Northwestern University Medical School, Department of Neurology, presented the main paper of the afternoon session. His subject was "Differentiation of Malingering, Brain Injuries, and Organic Brain Disease." Dr. Stone proved to be a very interesting speaker as was evidenced by the close attention paid to him and the great number of questions asked of him.

Following an excellent steak dinner, Dr. Austin Hayden of Chicago, secretary of the Board of Trustees of the American Medical Association, spoke on "Medical Economics." His remarks were concerned chiefly with the various bills in Congress and other matters pertaining to the health of the country. His talk was well received.

The gathering was especially honored by the presence of Dr. K. R. Ruddell of Indianapolis, our state president, Dr. M. A. Austin of Anderson, chairman of the Council for the State Association and editor of *Asbestos Archives*, and executive secretary for the State Association, Mr. Thomas A. Hendricks of Indianapolis. Each of the visitors favored the assembled group with a few remarks.

Paul Garber, M.D., of South Whitley, was elected president; Ralph Elston, M.D., Fort Wayne, was made vice-president; S. R. Mercer, M.D., Fort Wayne, was re-elected secretary-treasurer; and Harvey Murdock, M.D., Fort Wayne, was elected to succeed A. J. Sparks, M.D., as councilor.

S. R. MERCER, M.D., *Secretary.*

ACTIVITIES OF THE INDIANA ASSOCIATION OF THE HISTORY OF MEDICINE—1940

The first meeting of the year was held September twentieth in the library lounge of the Lilly Research Laboratories, with Dr. Edgar F. Kiser, the president, presiding. Dr. E. N. Kime of the Indiana University medical faculty, discussed "Physical Medicine—Its Present Status as Viewed in the Light of Its Historical Evolution." The paper was discussed by Doctors Voyles, Bowers and Inlow, and copies were distributed to the members.

Dr. and Mrs. Kiser were host and hostess to the group at a Thanksgiving meeting. Dr. Kiser showed a series of lantern slides depicting medicine in art and sculpture, accompanying each with an entertaining description.

The members of the Indianapolis group of special librarians who were having a dinner meeting at the Riley Hospital were invited to meet with the Association in the auditorium of the Medical Center on Wednesday evening, January seventeenth. Miss Cordelia Hoeflin, director of nurses' training, displayed her character dolls dressed to illustrate the history of nursing through the ages. Dr. Thurman B. Rice addressed the group on the "History of Bacteriology." Coffee was served in the Medical School Library, with Mrs. W. D. Gatch and Miss McNutt, the librarian, as hostesses.

The new Inlow clinic in Shelbyville was the place of meeting in March, with Dr. William D. Inlow as host. Dr. Inlow gave an illustrated lecture on the "History of Surgical Instruments," interspersed with delightful bits of medical philosophy. After a tour of the clinic, Dr. and Mrs. Inlow served refreshments in the new clinic library.

At the Shelbyville meeting, March twentieth, election of officers was held. Dr. W. D. Inlow was made president for the coming year, and Mrs. Irene Strieby was re-elected secretary-treasurer.

The May meeting will be held at the Indiana University Dental School with Dr. Crawford, the new dean, as host, and Mrs. Mabel Walker, librarian, assisting.

IRENE M. STRIEBY, *Secretary-treasurer.*

NOTED SPEAKER FOR PUBLIC MEETING

Dr. Paul Harrison, speaker for the public meeting on Friday evening, May tenth, during the eighth annual postgraduate course of the Indiana University School of Medicine, is a native of Nebraska, a graduate of Johns Hopkins, and since 1908 has been a medical missionary in Arabia. He founded a hospital on an island in the Red Sea where his observations on the habits, customs, and diseases of the Arabs were extensive, and where he has done intensive work on hernia upon which subject he is a leading authority. He traveled with the Arabs through their country to learn their ways. Dr. Harrison is an able speaker and you will want to be present at Caleb Mills Hall, Indianapolis, May 10, at 8:30 p. m. to hear him. Complete program for the postgraduate course appears on page v in this issue.

WOMAN'S AUXILIARY

President—Mrs. W. E. Tinney, Indianapolis.
President-elect—Mrs. C. R. Bock, Muncie.
Corresponding Secretary—Mrs. Byron Rust, Indianapolis.
Treasurer—Mrs. C. V. Rozelle, Anderson.

LAKE COUNTY AUXILIARY

At the request of the State Auxiliary president, Mrs. William E. Tinney, the address of the first president of the Lake County Medical Society is published herewith.

I sometimes think of myself as a perennial adolescent, "standing with reluctant feet—where the brook and river meet." It was with reluctance, some years ago, that I embraced suffrage, feeling as I did that, by it, woman lost almost as much influence as she gained. Be it said, however, that at no time have I failed to register and to vote!

I have likewise been slow to be persuaded of the need or value of women's auxiliaries to medical societies, especially in places so busy and over-organized as the part of Greater Chicago that we call Lake County, Indiana. But now that I appreciate the fact that there is a real way in which women's auxiliaries may serve not only American Medicine but American Democracy as well, I am only too glad to enroll and to serve in whatever capacity I can.

It is neither my purpose nor my function to discuss "Socialized Medicine," nor any legislation aimed at the regimentation of medical practice; yet when the United States Circuit Court of Appeals rules, in effect, that the practice of medicine is a trade and not a profession, it is quite evident that the time has come when every intelligent man and woman should be informed, and correctly informed, concerning the achievements of American Medicine. In this program of education, the Woman's Auxiliary has a part to play; we must help postpone the day when a certain quip, found in Dr. Irving Cutter's health column, in the Chicago Tribune, may not be as funny as its sounds:

"No Best Month"

"Mrs. M. writes: Has the medical profession decided upon the month most favorable for childbirth—for the welfare of mother and babe?

Reply—No. One month is as good as another. There are good arguments for each of the twelve. No government bureau has as yet attacked the problem. We live in hope."

We have undertaken the organization of a Lake County Auxiliary at the definite request of our County Medical Society. My dictionary gives what I consider an adequate definition of an auxiliary as "that which gives or furnishes aid or support, especially in a subordinate or secondary manner." The Lake County Medical Society feels that we can give them valuable assistance in their Public Relations program, and the methods and channels of that service will be suggested by or approved by that Society.

Our Auxiliary is fortunate in serving a Society which employs a full-time executive secretary, and one so able as Mr. Rollen Waterson. Mr. Waterson has assured us of his constant counsel and assistance in perfecting and conducting our organization and in carrying out all our projects. There will be need for many committees and for the 100% cooperation of the wives of Lake County physicians. The committees once established, the work should not be onerous for any individual.

This is an organization for *service* and not for social intercourse; as one Auxiliary head has put it, "the day of the pink teas has passed; tea and cookies and flute solos have flown out the window." This is a "call to the colors," not only of American Medicine but of true Democracy as a living force in our government. Let your answers to our request be not "Nay-Nay," but rather "Yea-Yea!"

MRS. E. M. SHANKLIN, *President*,
Lake County Auxiliary.

THE MADISON COUNTY AUXILIARY

OFFICERS—1939-1940

President	Mrs. C. V. Rozelle
First Vice-President	Mrs. M. C. Wells
Second Vice-President	Mrs. J. W. King
Third Vice-President	Mrs. C. L. Willson
Recording Secretary	Mrs. George Moore
Corresponding Secretary	Mrs. Florence Smith
Treasurer	Mrs. Guy Ross
Historian	Mrs. M. A. Austin
President-elect, 1940-1941	Mrs. F. B. Wishard
Publicity Chairman	Mrs. J. C. Armington

On October 18, 1927, the Auxiliary was organized by Mrs. Frank Cregor of Indianapolis, the first president of the State Auxiliary, with a membership of eighteen. Our present membership is forty-three.

After several years of meeting, mostly for sociability, we organized the Victoria Guild. It was named in memory of Sister Victoria, a valiant nun, under whose guidance the first hospital in Anderson, St. John's, was built. Mrs. H. W. Gante, the first president of the Guild, was an untiring worker. Membership in the Guild is open to any woman interested in the humanitarian work of the organization. We now have an enrollment of four hundred members.

Meetings of the Auxiliary are held in parlors of the Nurses' Home the first Monday of each month.

In September of each year programs are distributed for the year's work. A dinner always precedes the meeting at which are discussed matters of interest to the Auxiliary and the Guild. Contributions are made to the Red Cross, The Ella B. Kehrer Tuberculosis Hospital, the Visiting Nurse Shower, and other welfare works.

During the past year The Auxiliary has sponsored a book review by Mary Margaret Harrington, a travel talk by Wilfred Byrkett, and at our February meeting a very informative speech on Cancer Control by Dr. C. V. Rozelle. A public relations tea is being planned for Hospital Day, to be held at the Nurses' Home. This is the outstanding event of the year and the women of the city are invited to attend.

THE ST. JOSEPH COUNTY AUXILIARY

OFFICERS—1939-1940

President	Mrs. P. C. Traver
First Vice-President	Mrs. H. D. Pyle
Recording Secretary	Mrs. E. Blackburn
Corresponding Secretary	Mrs. F. W. Logan
Treasurer	Mrs. Joseph Lang
Program Chairman	Mrs. W. E. Spencer

The St. Joseph County Auxiliary was founded in June, 1936, and now has a membership of sixty. With a varied and interesting program it is hoped that still more doctors' wives will increase the membership.

Four health programs are being sponsored by the auxiliary. The Department of Public Health, South Bend, will loan films to be shown in public and Catholic schools, and physicians will accompany the showing with talks. These will be on (1) Colds and Pneumonia, (2) Tuberculosis, (3) Syphilis, (4) General—Ask Your Dentist—Policing the Mouth—Food and Growth.

This year the auxiliary has placed *Hygeia* magazine in each public school in South Bend, including the Catholic school, and has planned to include the county schools.

A reception held at the home of the program chairman last fall opened the year's program with an announcement of the coming meetings and a report from the delegate to the State Convention. Meetings following have included a luncheon sponsored for the Control of Cancer with Mrs. Isaac Born of Indianapolis, state Chairman of the Woman's Field Army, as a guest speaker; a program with Mrs. Merle Whitlock of Mishawaka, discussing public relations and the auxiliary's obligation to the St. Joseph County Medical Society; a luncheon held at the Oliver Hotel with Mrs. W. E. Tinney of Indianapolis, state auxiliary president, as speaker on "What Part the Auxiliary Can Play Toward Abolishment of Plans for State Medicine Program"; a Lenten program in the form of a guest tea at the St. Mary's College, Notre Dame, with Sister Madelena, president, as speaker on "Spring in the Four Continents." The program will end with a May breakfast at the South Bend Country Club with Dr. R. L. Sensenich, past president of the Indiana State Medical Association, as speaker on "The Wagner Bill and Its Relation to State Medicine and Effects on the Medical Profession and Community at Large."

It WON'T BE LONG NOW before the Woman's Auxiliary to the American Medical Association will be convening at the Hotel Pennsylvania, New York City, for their 18th Annual Convention to be held June 10 to 14, 1940. IS YOUR RESERVATION IN? We are sure you will want to stay at the headquarters, Hotel Pennsylvania. In order to get a reservation, mail your request today to Dr. Peter Irving, Housing Bureau, Room 1036, 233 Broadway, New York City.

LOCAL SOCIETY REPORTS

OFFICERS FOR 1940

Tipton County Medical Society:
President, R. L. Fullerton, M.D., Tipton
Secretary, H. L. Ericson, M.D., Windfall

Washington County Medical Society:
President, I. E. Huckleberry, M.D., Salem
Secretary, T. Kermit Tower, M.D., Campbellsburg

* * *

Bartholomew County Medical Society met at Columbus, March twenty-seventh, for a dinner meeting. Ten members were present.

* * *

Clay County Medical Society met at Brazil, March twelfth. Dr. James H. Stygall, of Indianapolis, presented a paper on "Tuberculosis." Twelve members were present.

At the April second meeting, at Brazil, eight members were present for a business meeting.

* * *

Dearborn-Ohio County Medical Society held a meeting March twenty-eighth at Lawrenceburg. Dr. M. C. McKain talked on "Medical Business Problems." A round-table discussion on medical business affairs followed. Fourteen members were present.

* * *

Dubois County Medical Society held a meeting in the court house at Jasper, March eighteenth. The following officers were elected: President, Dr. E. F. Steinkamp, Huntingburg; vice-president, Dr. H. G. Becker, Ferdinand; secretary-treasurer, Dr. A. H. Held, Huntingburg.

The operation of the new marriage law was discussed. Fourteen members were present.

* * *

Elkhart County Medical Society held their annual meeting April fourth, with a morning session at the Elkhart General Hospital and an afternoon and evening session at Hotel Elkhart. Papers were presented in the afternoon by Dr. Peter Rosi, of Chicago, Dr. Merrill Wells of Grand Rapids, and Dr. G. F. Scubri and Dr. Max Thorek, both of Chicago.

An orthopedic fracture table was demonstrated by its designer, Dr. R. B. Stout.

* * *

Fort Wayne Medical Society held a meeting March nineteenth, at the Chamber of Commerce. Guest speaker of the evening was Dr. George T. Pack, of New York. His topic, "The Progress of Science in the Treatment of Cancer," was accompanied by numerous illustrations.

At the March twenty-sixth meeting, Dr. A. N. Ferguson talked on "Concept of Heart Disease."

* * *

Fort Wayne Medical Society held a dinner meeting at the Indiana Hotel, April sixteenth, with seventy-five in attendance. Guest speaker was Dr. A. M. Snell, of The Mayo Clinic, whose subject was "Problems Presented by the Jaundiced Patient."

* * *

Fountain-Warren County Medical Society held a meeting at Kingman, April fourth. Dr. Goethe Link, of Indianapolis, was guest speaker, his subject being "Goiter." Attendance numbered thirty-four.

* * *

Gibson County Medical Society held a meeting at the Emerson Hotel, Princeton, March third. Dr. Carl H. McCaskey, of Indianapolis, talked on "Ear, Nose, and Throat Conditions as They Affect the General Health." Attendance numbered eighteen.

It was decided to send a letter of protest in regard to Dr. Hugh Cabot's article in the *American Magazine* to the Mayo Clinic, to the secretary of the State Medical Association, and to the American Medical Association. (The letter is published under "Correspondence" in this issue.)

At the meeting of the Gibson County Medical Society held in the Emerson Hotel, Princeton, April eighth, Dr. George Garceau of Indianapolis was the guest speaker. His subject was "Fractures of the Wrist and Ankle." Attendance numbered twenty-two.

* * *

Henry County Medical Society members met at Newcastle, March twenty-first, to hear Dr. W. D. Gatch, of Indianapolis, present a paper on "Appendicitis in Children." Thirty-five members were present.

* * *

Howard County Medical Society held a dinner meeting at the Courtland Hotel, Kokomo, April fifth. Films were shown on "Seeing How We See" and "Contact Lenses." Twenty-four members were present.

The society decided to adopt a minimum fee of three dollars per person for the premarital examination.

* * *

Huntington County Medical Society met at the Hotel Lafontaine, Huntington, April second. Dr. J. Rodriguez, of Fort Wayne, discussed the use of x-ray. Thirteen members were in attendance.

* * *

Indianapolis Medical Society held a meeting at the Indianapolis Athletic Club, March nineteenth. Dr. Thurman B. Rice talked on premarital examination laws.

On April second, members met at the Indianapolis Athletic Club. Dr. P. E. McCown led a discussion on "Etiology and Treatment of Renal and Ureteral Calculus." Other speakers were Dr. Eugene Boggs, Dr. William N. Wishard, Jr., Dr. Walter P. Morton, and Dr. Ernest Rupel.

April ninth, a joint meeting of the Indianapolis Medical Society and the City Hospital staff was held. Papers read were "Clinical Significance of Eosinophilia," by Dr. Bennett Kraft; "Use of the

Miller-Abbott Tube in Intestinal Obstruction," by Dr. H. A. Brocksmith; "Hypertension," by Dr. I. H. Page, and "The Reactions from Intravenous Diodrast," by Dr. William N. Wishard, Jr.

* * *

Jasper-Newton County Medical Society met at the Hoosier Inn, Rensselaer, March twenty-eighth. Dr. G. D. Larrison was host. Speaker of the evening was Dr. James C. Carter, of Indianapolis. His topic was "Contagious Diseases of Children." Fourteen members and three guests were present.

* * *

Jay County Medical Society held a meeting April fifth, at the county hospital. Dr. H. O. Mertz of Indianapolis gave a talk on "Injuries to the Urinary System."

* * *

Knox County Medical Society members met at the Nurses Home, Good Samaritan Hospital, Vincennes, March nineteenth. A report on the recent meeting, in Florida, of the International College of Surgeons was given by Dr. M. L. Curtner of Vincennes. Ten members attended the meeting.

* * *

Lake County Medical Society held a meeting March fourteenth, at St. Catherine's Hospital, East Chicago. Ninety-four members were in attendance. Papers were presented by Dr. Robert Black, Dr. Bert Beverly, and Dr. Stanley Gibson, all of Chicago. Their topics were "Manifestations of Upper Respiratory Tract Infections in Children," "Behavior Problems in Normal Children," and "Manifestations of Rheumatic Infection in Children," respectively.

* * *

Lake County Medical Society members met at St. Margaret's Hospital in Hammond, April eleventh, with an attendance of 110. A symposium on obstetrics and gynecology was presented by Drs. George Gardner, John W. Huffman, and James Bloomfield, all of Chicago. Their subjects included "Diagnosis of Leukorrhea," "The Use and Abuse of Endocrine Therapy in Women," and the "Management of Prolonged Labor." Dr. J. Kopcha presented a moving picture on obstetrics. Mr. Thomas A. Hendricks, executive secretary for the Indiana State Medical Association, was present.

* * *

LaPorte County Medical Society met March twenty-first at the Spaulding Hotel, Michigan City. A paper was presented by Dr. M. Herbert Barker, of Chicago. His subject was "The Present Status of the Medical and Surgical Treatment of Hypertension." Twenty-two members were present.

* * *

Madison County Medical Society members heard Dr. F. C. Guthrie and Dr. W. M. Miley present a symposium on the heart at the March meeting.

The April meeting was a dinner meeting at the Anderson Country Club, April fifteenth. Members of the medical and dental societies were guests of Mr. Lee Paynter. The guest speaker was Dr. C. B. Jordan, dean of the School of Pharmacy at Purdue University.

* * *

Madison County Medical Society held a meeting at the Anderson Country Club, April fifteenth. Professor J. C. Klemme of Purdue University was the principal speaker. His subject was "Chemical Relations of Certain Vitamins and Hormones." This was a joint meeting of the Madison County Medical Society and Madison County Dental Society with eighty-three members present.

* * *

Marshall County Medical Society met for luncheon at the Hi-Way Inn, Plymouth, April third. A talk on "Hypertension" was given by Dr. M. T. Hewitt of South Bend.

* * *

Monroe County Medical Society met March twenty-seventh at Bloomington. Reports on "Pyeletis in Pregnancy," by Dr. Neal Baxter, and "Pyelonephritis in Children," by Dr. Raeburn Austin were given.

A letter was read from the city fire chief informing the society that the city now has a late model respirator available for use upon call by physicians.

* * *

Montgomery County Medical Society held a meeting at the Culver Hospital, March twenty-first. Dr. Ernest Rupel, of Indianapolis, presented a paper on "Sulfapyridine in the Treatment of Gonorrhea." Attendance numbered twenty. Five members of the Putnam County Society attended.

* * *

Parke-Vermillion County Medical Society held a meeting at the Clinton Hospital, Clinton, March twentieth. Dr. George W. Bowman, of Indianapolis, presented a paper entitled "Venereal Diseases and the Prenatal and Premarital Laws." Seven members were present.

* * *

Perry County Medical Society members met at Tell City, March twenty-sixth. Dr. N. A. James presented a paper on "Common Diseases of the Eye." Nine members were present.

* * *

Shelby County Medical Society held a regular meeting at the Major Hospital in Shelbyville, April third. Dr. Louis H. Segar of Indianapolis gave an address on pediatrics.

* * *

St. Joseph County Medical Society members met at the LaSalle Hotel, South Bend, March twelfth. Dr. George Gates, of South Bend, talked on "Gastro-Colic Fistula," and Dr. Milo Miller spoke on "Blood Transfusion Reactions." Attendance numbered forty-one.

At the March twentieth meeting, held in South Bend, Dr. Henry Poncher, of Chicago, presented a paper on "Recent Advances in Diagnosis and Treatment of Hemorrhagic Disease in the Newborn." Fifty members were present.

Dr. Alfred Ellison, of South Bend, spoke on "Tumors of the Breast," and Dr. L. S. Erikson, of South Bend, talked on "Cancer of the Breast," at the meeting held March twenty-sixth at the LaSalle Hotel, South Bend. Thirty-two members attended.

* * *

St. Joseph County Medical Society members held a meeting at the LaSalle Hotel, April ninth. Dr. W. L. Spalding was the principal speaker, his subject being "Stillborn, and Newborn Mortality." Attendance numbered thirty-two. A film was shown by the Upjohn Company on "Ovulation and the Effects of the Gonadotropic Hormone of Pregnant Mares' Serum."

* * *

Tippecanoe County Medical Society members met March twelfth at Lafayette Home Hospital, Lafayette. A symposium on "Care of the Premature and Newborn Infant" was presented by Frances T. Brown, M.D., Miss Mary Ellen Wartzler, R.N., and Howard B. Mettel, M.D., all of Indianapolis.

After dinner, Dr. Lillian G. Moulton, of Indianapolis, presented a paper on "Behavior Problems in Children." Seventy-five members were present at the Clinic, and one hundred twenty-five were present at the address in the evening.

* * *

Tippecanoe County Medical Society members met at Lincoln Lodge and St. Elizabeth Hospital in Lafayette, April ninth. Dr. Karl R. Ruddell of Indianapolis, president of the Indiana State Medical Association, talked on "The Acute Abdomen." Attendance numbered sixty.

* * *

Tipton County Medical Society held its March meeting at the Elks Home. Members went on record as favoring the conversion of the county infirmary into a hospital to serve the entire county. The subjects of prenatal examinations and premarital blood tests were discussed and a fee schedule determined by members of the society. Dr. W. F. Tranter of Sharpsville reported three cases of scurvy, and there followed a motion picture on the treatment of varicose veins.

* * *

Tipton County Medical Society met at the Elks Lodge in Tipton, April eighth. Dr. J. H. Warvel, of Indianapolis, spoke on "Pituitary Disturbances." Dr. J. V. Carter, of Tipton, presented several case reports.

* * *

Tri-County Medical Society met at the Carothers' residence in Shoals, March twenty-fifth, for a regular meeting and dinner. Dr. B. O. Burress gave a talk on "Acne Vulgaris." Eleven members were present.

* * *

Union County Medical Society held a meeting at Peru, March twenty-ninth. Speakers were Dr. Charles J. Cooney and Dr. Wayne R. Glock, both of Ft. Wayne. Their topics were "Traumatic Injuries of Urinary Tracts," and "Fractures of Pelvis."

* * *

Wabash County Medical Society held a meeting April third at Wabash. Dr. Paul L. Stier, of Fort Wayne, presented a paper on "The Heart." Ten members were present.

* * *

Wayne Union County Medical Society met at the Richmond Leland Hotel, Richmond, on March fourteenth. Dr. Maude Slye, of Chicago, was the guest speaker of the evening. Her topic was "Heredity and Cancer." Attendance numbered thirty-seven.

CLAY COUNTY MEDICAL SOCIETY

At a recent meeting of the Clay County Medical Society, a resolution was passed by unanimous consent:

> "Resolved: That no member, in good standing of the Clay County Medical Society would consult with any irregular practitioner, or any cultist. And, if any member was found guilty of such consultation, he would automatically lose his rights of Membership in the Society."

This resolution was discussed at the fall meeting of the Fifth District Medical Society, and Clay County's action was approved and the resolution was adopted to apply to the whole of the Fifth District.

We feel that if this idea were adopted throughout the state, the cultists, especially osteopaths and chiropractors, would soon be extinct, particularly in smaller communities where they must depend upon medical assistance.

JOHN M. PALM, M.D., *Secretary,*
Clay County Medical Society.

BOOKS WANTED

Dr. George C. Stevens, director of the division of medical care, and Mr. Thurman A. Gottschalk, administrator of the State Department of Public Welfare, are appealing for gifts of books and magazines to aid in building up libraries at state institutions, particularly the mental hospitals. The book drive will be held in connection with "State Institution Week," May 12 to 18, celebrating the completion or near completion of a three year building program at Indiana institutions. Gifts of books and magazines will be collected by the welfare department at the close of Institution Week, and will be sorted by the department librarian and routed to the appropriate institution.

It is asked that wherever possible, books be gathered at some central location to await pick-up by the welfare department. County welfare departments throughout the state have been asked to serve as this central agency. Physicians who wish to cooperate in this cause are asked to leave their books at the county welfare office. County medical societies may establish their own place for the collection of gifts from members at a hospital, clinic, or some other suitable place. If books will be available at some place other than the county welfare department, please advise Information Service, State Department of Public Welfare, 141 South Meridian Street, Indianapolis.

INDIANA STATE BOARD OF HEALTH

BUREAU OF COMMUNICABLE DISEASES

Monthly Report, March, 1940

DISEASES	*Mar. 1940*	*Feb. 1940*	*Jan. 1940*	*Mar. 1939*	*Mar. 1938*
Tuberculosis	188	93	74	132	111
Chickenpox	404	274	336	406	389
Measles	64	26	38	56	4245
Scarlet Fever	1179	849	667	817	668
Smallpox	15	10	25	198	173
Typhoid Fever	4	15	3	4	3
Whooping Cough	205	149	131	128	94
Diphtheria	41	66	70	55	135
Influenza	10318	1115	154	1287	74
Pneumonia	88	142	117	159	77
Mumps	1688	495	392	247	88
Poliomyelitis	1	1	3	3	2
Meningitis	7	1	4	3	8
Trachoma	21	6	5	1	1
Tularemia	4	3	30	0	0
Septic Sore Throat	6	7	10	0	0
Undulant Fever	5	1	3	3	2
Malaria	1	1	0	1	0
Encephalitis	1	3	0	0	0
Dysentery	1	1	0	0	0
Leprosy	1	0	0	0	0

BOOKS

BOOKS RECEIVED

ESSENTIALS OF THE DIAGNOSTIC EXAMINATION. By John B. Youmans, M.D., Associate Professor of Medicine and Director of Postgraduate Instruction, Vanderbilt University Medical School. 417 pages, illustrated. Fabrikoid binding. Price $3.00. The Commonwealth Fund, New York, 1940.

CANCER IN CHILDHOOD. And a Discussion of Certain Benign Tumors. Edited by Harold W. Dargeon, M.D., F.A.A.P., attending pediatrician, Memorial Hospital for Cancer and Allied Diseases, New York; instructor in pediatrics, College of Physicians and Surgeons, Columbia University. 114 pages. Illustrated. Cloth. Price $3.00. The C. V. Mosby Company, St. Louis, 1940.

COMPENDIUM OF REGIONAL DIAGNOSIS IN LESIONS OF THE BRAIN AND SPINAL CORD. A Concise Introduction to the Principles of Localization of Diseases and Injuries of the Nervous System. By Robert Bing, Professor of Neurology, University of Basel, Switzerland; translated and edited by Webb Haymaker, M.D., Assistant Clinical Professor of Neurology, University of California. Eleventh edition. Cloth. 292 pages with 125 illustrations, 27 in color, and 7 plates. The C. V. Mosby Company, St. Louis, 1940.

SYNOPSIS OF OBSTETRICS. By Jennings C. Litzenberg, M.D., F.A.C.S., Professor Emeritus of Obstetrics and Gynecology, University of Minnesota Medical School, Minneapolis. 157 illustrations, 5 in color. 394 pages. Fabrikoid binding. Price $3.00. The C. V. Mosby Company, St. Louis, 1940.

ABSTRACTS

JOURNAL OUTLINES PROVISIONS OF NEW CAPPER-EPSTEIN BILL

"This would seem to be the open season for weird efforts at plans and legislation to solve medical problems," *The Journal of the American Medical Association* for April 6 declares in an editorial outlining the provisions of the revised Capper-Epstein Health Insurance Bill.

"And now comes still another edition of the health insurance bill sponsored by the American Association for Social Security through Mr. Abraham Epstein. Again this perennial was introduced in the Senate, May 25, as S. 3660, by Senator Capper, of Kansas, who has sponsored practically all previous editions. The present bill proposes a federal appropriation of $50,000,000 for the fiscal year ending June 30, 1941, and thereafter as much as may be necessary, to induce the states to embark on a combined program of compulsory and voluntary health insurance. The Social Security Board must approve all state plans. Exempted from the compulsory features of any state plan, it is proposed, will be those engaged in agricultural labor, in domestic service for an employer having less than three employees engaged in such service, and services performed by a minor who is actually in regular attendance during the day time as a student in an institution of learning.

"Plans must provide for cash benefits for loss due to disability and for medical benefits. The fund out of which benefits are to be payable is to be created and maintained by regular premiums paid by the state, employers and employees set according to wage classes, and by federal donations. The amount of the cash benefit to be paid an individual must be fixed according to the wage class of the individual and according to the number of his dependents. The administration of a state plan will be lodged in a central state board, a state commission of health insurance and a statewide system of local councils and local administrative offices.

"Medical benefits must be supplied to employees coming within the scope of the scheme and to their dependents. Local councils will prepare and publish lists of physicians, dentists, nurses and others who have previously agreed or with whom arrangements have been made to furnish medical benefits, and an employee will be permitted to select from such list the general medical practitioner and the general dental practitioner or the group of such practitioners by whom he wishes to be treated. For services rendered under a state plan the physician, dentist or other person or institution rendering them will be paid according to the manner of remuneration decided on by the local council, which may be a salary system, a per capita system, a fee system or a special arrangement with a group of practitioners.

"The federal government, the bill proposes, will contribute to any state that has an approved plan for health insurance an amount equal to one half of the total of the premiums required to be paid by a state, this part of the federal subsidy to be used exclusively for the supplying of benefits. In addition, the federal government will pay 5 per cent of the state premiums to be used for the paying of the cost of administration for administering the state plan or for benefits, or for both. The bill is pending in the Senate Committee on Education and Labor, along with the Wagner health bill, the Lodge health bill, the Wagner-George hospital construction bill, the Mead hospital construction bill and various and sundry others.

"If there is any fault inherent in any compulsory insurance system that is not present or even intensified in this new Epstein concoction, these weary eyes fail to detect its absence."

SHOCK IS DUE TO CIRCULATORY DEFECT ORIGINATING IN THE CAPILLARIES

The condition known as shock, which may follow severe physical injury or extensive surgical procedures, results from a deficiency of blood circulation originating in the capillaries (minute blood vessels connecting the small branches of arteries and veins) rather than in the heart itself, Virgil H. Moon, M.D., Philadelphia, says in *The Journal of the American Medical Association* for April 6.

The mechanism involved includes the reciprocal effects of two major factors—capillary atony, or loss of strength, and deficiency of oxygen in the tissues. Either of these factors will presently cause the development of the other. Thus a vicious circle is set up.

In explaining how these two factors may originate, Dr. Moon points out that the capillary endothelium (the layer of cells lining the capillaries) is delicately sensitive to physiologic conditions such as oxygen deficiency and metabolic products. Likewise it is exceedingly susceptible to the action of a wide variety of injurious agents, including chemicals, poisonous drugs, anesthetics, venoms and bacterial toxins. Under the influence of any such agent the endothelium loses its normal strength and becomes abnormally permeable to blood plasma (the fluid portion of the blood), which escapes into the tissues. As a result there is a decrease in the blood volume, tending to lower the efficiency of the circulation.

In order to offset this the arteries tend to contract, thus requiring less blood. So long as this compensation is effective there is no serious decline in the blood pressure but the latter is maintained at the expense of the volume flow of blood. However, extensive constriction of the arteries may reduce the volume flow too low and seriously reduce the delivery of oxygen to the tissues. Capillary endothelium is sensitive to lack of oxygen, and when such lack develops in the tissues the capillaries again lose their strength and become abnormally permeable. This fact supplies the connecting link in the vicious circle of shock.

When compensation for the reduced blood volume, by arterial contraction and by discharge of the blood from such organs as the spleen, is no longer effective, the blood pressure declines progressively and the symptoms comprising shock appear.

These symptoms may arise from a wide variety of causes, Dr. Moon points out. Shock may follow extensive surgical procedures or severe physical injury. Its occurrence is common in war time, when it often results from a combination of factors rather than from a single one. These factors include absorption from injured areas, delay in operation, anesthesia, hemorrhage, infection, exposure, exhaustion, cold and emotional reactions.

SENSITIVITY TO IODINE MAY DEVELOP IN TREATING OVERACTIVE THYROID

The dangers of continuing the use of iodine for the treatment of an overactive thyroid after symptoms of sensitivity to the drug have developed are pointed out in *The Journal of the American Medical Association* for March 23 by W. Halsey Barker, M.D., and W. Barry Wood Jr., M.D., Baltimore, who report the case histories of seven patients with such sensitivity, one of whom died.

Pointing out that iodism or idiosyncrasy to iodine has long been recognized as an accident likely to occur in a small proportion of patients, the two physicians say that the majority of such cases that have been reported developed during the course of antisyphilis treatment. In view of the widespread use of iodine for an overactive thyroid they say that "it is surprising how few unfavorable reactions to this form of treatment have been reported. It is quite possible that certain attacks of fever in patients receiving iodine treatment have been instances of mild iodism which passed unrecognized. Fatal iodism, such as occurred in one of our cases, must be extremely rare."

(Continued on page xxii)

PROFESSIONAL PROTECTION

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ABSTRACTS—Continued from page xxi

The seven cases they report occurred in a group of 400 patients receiving iodine treatment for overactive thyroids. The symptoms of the sensitivity consisted of elevated temperature with rash, itching, an abnormal rise in eosinophils (a certain type of white blood cell), sore and inflamed throat, head cold and inflammation of the membrane lining the eyeball and eyelids.

In four cases the temperature had begun to rise on or before the fourth day of iodine treatment and in the other three it appeared considerably later. The peak of the fever, reached within several days of the onset, varied between 101 and 105 F. In three cases the temperature returned to normal within several days after iodine had been discontinued, whereas in four instances it persisted for periods of from ten to thirty days. The form in which the iodine was given seemed to be of no importance nor was the dose excessively large or small in any case.

CARDIAC NEUROSIS TREATMENT REQUIRES REASSURING EXPLANATION OF SYMPTOMS

Treatment of cardiac neurosis should involve a simple and reassuring explanation of the nature of the symptoms and of their innocence so far as life and the ultimate prospects are concerned, an editorial in *The Journal of the American Medical Association* for Oct. 28 states.

Cardiac neurosis is a condition in which the patient has symptoms which he believes are caused by heart disease but which actually are unrelated to any organic changes in the heart itself.

"Pain is more frequently a presenting symptom in cardiac neurosis than in organic heart disease, except in coronary thrombosis," *The Journal* says. "Among other symptoms more common in neurosis are weakness, sighing respiration, insomnia, ringing or pounding in the ears, and faintness, dizziness, nervousness, irritability and flushes. The menopause, a low-grade infection or anemia, a sudden visceral disturbance, colonic irrigation, or a severe bout of seasickness may serve as precipitating factors.

"Cardiac neurosis is a distinct entity with characteristics which can be recognized even in the presence of organic heart disease by the following criteria: an inherited or acquired predisposition to neurosis; a definite precipitating factor; symptoms such as inframammary (breast) pain and the others mentioned; inframammary tenderness and hyperalgesia (excessive sensitiveness to pain); and, finally, relief by simple procedures such as intradermal injection of small quantities of procaine hydrochloride, together with suitable suggestion, the latter being the more important."

Delinquency and achievement appear to run in families not so much because of similar ancestry, but more because of similar environment.—*Hygeia.*

NOVOCAIN HAS OTHER TREATMENT VALUES BESIDES THAT OF ANESTHETIC

Procaine hydrochloride, commonly known as novocain, in addition to its value as a local anesthetic, has proved beneficial in the treatment of many disorders, especially acute injuries, Tom Outland, M.D., Harrisburg, Pa., and C. R. Hanlon, M.D., Sayre, Pa., point out in *The Journal of the American Medical Association* for April 6.

"Procaine treatment is of definite value in fractures which do not require correction and immobilization," they declare. Such fractures, in which severe injury to the ligaments is primary and the fracture itself of secondary importance, include those of the lumbar transverse processes (the projecting points on each side of the vertebrae of the loin region), fractures of the vertebral spines and fractures of the head of the radius (the bone on the outer side of the forearm).

Sprains of muscles and ligaments, muscle bruises, acute inflammation of the joints due to injury, and acute inflammation of a bursa (a saclike cavity filled with sticky fluid, situated in the tissues at a place where friction would otherwise develop) are other conditions in which the drug has been used with striking results. It has also given encouraging results in certain cases of arthritis and sciatica (inflammation of the nerve along the hip bone, attended with abnormal sensation along the thigh and leg).

In many of the cases cited by the authors a single injection was sufficient to cause prolonged relief of pain. They recommend that the patient be urged to move the injured part immediately after the injection.

Aside from its use as a treatment for injuries, procaine hydrochloride is advocated for various internal diseases, for disorders of the urinary tract, in eye, ear, nose and throat work, in dental surgery, in general surgery, in obstetrics and even in psychiatry.

ANOTHER REMEDY FOUND FROM WORK ON MAGGOTS

Following the medical discovery of the remarkable effectiveness of sterile blowfly maggots in healing stubborn wounds in human beings, Dr. William Robinson of the Bureau of Entomology and Plant Quarantine has continued investigations of the way maggots bring about such satisfactory results. He now finds that maggots produce a common and inexpensive chemical, ammonium bicarbonate, and that this compound stimulates healing similar to the healing by the maggots themselves.

Reporting to the medical profession through the American Journal of Surgery, the Federal scientist makes his third announcement of healing substances produced by the maggots. In 1935 Doctor Robinson discovered that allantoin, which occurs in the secretions of maggots, heals wounds rapidly. The following year he found that urea, a simpler chemical, acted similarly. Ammonium bicarbonate is still a simpler chemical compound and is formed naturally from urea by the action of an enzyme called urease.

After testing the ammonium bicarbonate solution on animals, Doctor Robinson obtained the cooperation of physicians and surgeons, some of whom had previously used allantoin and urea. His report in the Journal of Surgery is largely a summary of their professional experience in treating infected wounds that did not yield to other methods. A one percent solution proved effective when used either as a wet pack or as an irrigation of an open wound. Some of the conditions cleared up by the new treatment were: Chronic osteomyelitis, diabetic and varicose ulcers, middle ear infections, stitch abscesses, infected lacerations, and other purulent wounds.

All three of the healing products Doctor Robinson has

(Continued on page xxiv)

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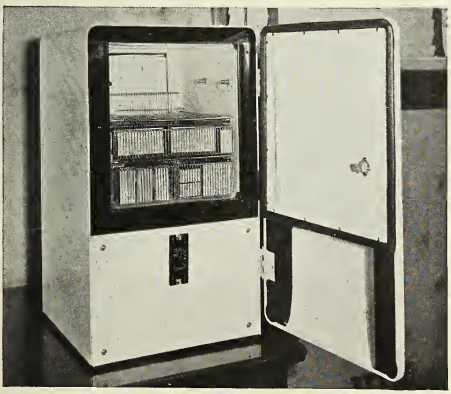
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*"Treatment of Acute Anterior Urethritis with Silver Picrate," Knight and Shelanski, AMERICAN JOURNAL OF SYPHILIS, GONORRHEA AND VENEREAL DISEASES, Vol. 23, No. 2, pages 201-206, March, 1939.

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ABSTRACTS—Continued from page xxii

discovered in maggot secretions are also made synthetically by chemical means. It is not advisable, says Doctor Robinson, for a person unskilled in medicine to attempt to treat himself and he should consult his doctor who understands the details of his case.

BLOOD PLASMA IS EFFECTIVE AGENT FOR TREATING SECONDARY SHOCK

Blood plasma (the clear fluid part of the blood before clotting has taken place), rather than whole blood or serum, is the most effective agent for transfusions to combat secondary shock, Max M. Strumia, M.D., and Joseph A. Wagner, M.D., Bryn Mawr, Pa., and J. Frederick Monaghan, M.D., Philadelphia, declare in *The Journal of the American Medical Association* for April 6.

Secondary shock may occur in cases of bleeding at the site of injury, loss of plasma in bruised tissue, loss of plasma and red cell concentration in burns and in injury to the intestines. Other conditions bringing about secondary shock are cold, fear, pain, suffocation, infection and decrease in the fluid concentration of the body.

Pointing out that the treatment of shock requires rapid and permanent increase of the blood volume in order to overcome the circulatory deficiency which causes the condition, the authors contend that plasma combined with a citrate (a salt derived from the acid present in citrous fruits) overcomes the disadvantages of whole fresh blood or of preserved citrated blood. It avoids delays due to typing and cross matching of blood, it can be stored without the deterioration which occurs in preserved blood, it prevents the undesirable addition of red cells to the patient's already concentrated blood and it avoids damage to the red cells occurring during transportation. This last factor is especially important in war conditions, when transportation is such a vital factor and when shock is especially apt to occur because of the depleted body reserves and the abnormal nervous strains to which soldiers are subjected.

The use of plasma also has advantages over serum, the clear portion of the blood *after* clotting, the authors point out. While neither agent requires typing, the severe reactions to serum which often occur are eliminated by the use of plasma. Moreover, there is a greater yield of fluid when citrated plasma is separated by centrifugation.

In their hospital, the authors state, blood plasma is a by-product of the blood bank. After blood has been in the bank for five days and is no longer at its best, the plasma is separated, pooled and stored.

The authors recommend the routine administration of plasma to all patients with severe injuries, regardless of the loss of blood. This will prevent the occurrence of shock or assure recovery if shock has already occurred. "Later on," the authors say, "the actual degree of anemia can be estimated, and transfusion with whole blood resorted to if considered essential to recovery or, as more commonly occurs, useful to shortening the period of convalescence."

REMEMBER—MAY IS OPPORTUNITY MONTH! SEE POSTGRADUATE PROGRAMS ON PAGES V-261-263.

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THE USES AND ABUSES OF ENDOCRINE THERAPY IN GYNECOLOGY*

JOHN W. HUFFMAN, M.D.
CHICAGO

The rapid advances in laboratory investigations, the facility with which synthetic products are being produced, the manufacturer's anxiety to out-do his fellow in placing his wares before the medical profession, the tendency of enthusiastic clinicians to make premature reports of their results, and the laity's unusual interest in their own "glands" make it easy for all of us to be swept along in the torrent of not yet sufficiently understood endocrine therapy.

In gynecological practice we are primarily interested in the application of endocrinology to the female sexual cycle and the phenomena pertaining thereto. We have certain groups of substances which we use or consider using in the management of these phenomena. Let us analyze these groups individually and attempt to clarify their application.

Anterior Pituitary Products: These come from four principal sources, (1) the urine of pregnant women and of pregnant mares, which are not true hypophyseal extracts but are rather anterior pituitary-like, (2) preparations made from animal pituitaries, (3) placental extracts, and (4) extracts from the serum of pregnant mares.

The administration of anterior pituitary preparations is advocated on the basis that the hypophysis is a regulator of ovarian function, i.e., it is gonadotropic, and through its gonadotropic action it controls, secondarily, the rest of the genitalia. Pituitary preparations have been given for almost every gynecological complaint, but their use has been especially applied to the treatment of amenorrheas, menorrhagias, dysmenorrheas, and problems of human sterility.

Unfortunately the anterior pituitary-like factor derived from pregnancy urine, of which antuitrin-S and follutein are well known commercial products, is principally luteinizing in character and probably has little effect (other than to increase the luteinization of already ruptured follicles) upon the ovary. It may be harmful rather than stimulating to the ripening follicle. Its use in amenorrheas and sterility should be undertaken only with caution. Certain instances of functional uterine bleeding may respond to this gonadotropic substance, but the results in our experience are not uniformly satisfactory.

Placental extracts react in essentially the same manner as do those from pregnancy urine.

Preparations of the anterior pituitary of animals, such as prephysin, have been shown to have a stimulating effect on the ovaries. However, the hypophysis contains a number of endocrine substances as yet not fully understood and from which the gonadotropic factor is not usually completely separated. Both follicle stimulating and luteinizing action may follow the administration of whole gland preparations. In addition, undesirable effects may result from the presence of other substances in such material. Furthermore, it has been shown by animal experiments that injections of anterior pituitary preparations tend to depress the pituitary of individuals receiving them.

While the extract of the serum of pregnant mares has been much touted in the recent literature because it is presumably safe for intravenous use and is supposed to contain both follicle and lutein stimulating substances, nevertheless we must proceed with extreme caution in its administration. I have seen three women develop anaphylactic reactions following injection of the usual dose, despite preliminary negative skin tests. It would appear that this extract is the most potent of the pituitary-like substances which we now have, and further investigation may warrant its more extensive use, particularly in sterility problems. Even here, however, its application will be limited for it would only be worthwhile in cases in which it

From the Department of Obstetrics and Gynecology, Northwestern University Medical School, and Passavant Memorial Hospital, Chicago.

* Read before the Lake County Medical Society, Hammond, Indiana, April 11, 1940.

has been shown that the patient's husband is fertile and that she has patent fallopian tubes and non-ovulatory menstruation. After several years of doing endometrial biopsies, we have been impressed with the rareness of non-ovulatory menstruation in women who are otherwise healthy.

Gonadogen (Upjohn) and Gonadin (Cutter) are two pregnant mare serum extracts which are widely used. The recommended ovulation-producing dose of Gonadogen is 60 Cartland units injected intravenously on the fourth day after menstruation has ceased. Ovulation is presumed to occur in the human within 48 hours following such an injection. Precautions against anaphylaxis are imperative.

Ovarian Preparations: Although whole ovarian products and ovarian residues have been in our pharmacopeias for many years, nevertheless, the inability to accurately estimate their potency leaves them outside the pale of modern therapy. The present day availability of active estrogens extracted from pregnancy urine or created synthetically in the laboratory has led to almost complete replacement of the older products.

One gratifying accomplishment of recent times is the relief afforded by potent estrogenic substances to women who are suffering from severe menopausal symptoms. Except for certain rather interesting items the use of these preparations in the menopause has become too commonplace to warrant emphasis. All women do not respond to a certain estrogenic substance in the same way. A patient who may not get relief from one milligram of pregnancy urine follicular extract will receive almost immediate help from a synthetic product. The reverse will hold true for another case. Most women require large dosages to begin with and after a matter of weeks apparently become saturated and can then be carried along on relatively smaller amounts. The author has been assisting Dr. Arthur H. Curtis in conducting a survey of the comparative effectiveness of a number of the well-known commercial products in private practice. There seems to be no doubt that estradiol dipropionate in 5 milligram doses is by far the most effective and most lasting preparation we have today. Products of lesser potency made by reputable manufacturers seem to be about equal when compared in equivalent amounts.

We have found we are often able, after the initial saturating doses, either to change to smaller amounts such as one milligram of theelin or di-ovocylin administered weekly or that the stronger injections, when supplemented by oral therapy, need not be given oftener than every three or four weeks. There are, however, some refractory cases which do not respond completely to massive doses even when given at frequent intervals.

It must be borne in mind that overdosage of estrogenic products can produce uterine bleeding. Excessive administration of these preparations during the menopause may bring about a return of menstruation which must be differentiated from uterine and ovarian neoplasms.

Many patients passing through the climacteric suffer not so much from the classical flashes and flushes as from an accentuation of varied psychological and physical complaints. Their troubles appear to them through the magnifying glass of the menopause. Proper estrogenic therapy affords these individuals untold relief. Several weeks of treatment often will be extremely illuminating.

The use of estrogenic hormones in cases of secondary amenorrhea, in sterility, and in functional uterine bleeding has never seemed rational. We must remain skeptical of the assertion that small doses of the estrogens will stimulate the pituitary, for much experimental evidence has been brought forth to show that large doses definitely inhibit the hypophysis. There can be but little doubt that the ovarian cycle is disturbed by the administration of follicular extracts. It is true that the proliferation of the uterine mucosa occurring after estrogenic therapy might be worthwhile in sterility, but again we must remember that we are affecting not alone the endometrium but also the pituitary and the ovary, the latter two perhaps adversely, when we give these preparations. The use of estrogenic substances in functional uterine bleeding is illogical—any cessation of bleeding is the result of pituitary inhibition and we are more apt to produce excess flow through endometrial stimulation than to stop the menorrhagia by inhibiting the pituitary. We are not familiar with the treatment of premenstrual tensions, headaches and dysmenorrhea with the "female sex hormone." The rationale of such procedures is not altogether clear.

Postmenopausal pruritus vulvae, kraurosis, senile vaginitis and childhood vaginitis frequently respond satisfactorily to estrogenic therapy. Cornification of the vaginal mucosa, similar to that seen in the childbearing years, following such treatment, explains the success attained in this group of patients. Amniotin and progynon-D vaginal suppositories are prepared for use in treating little girls, and ointments containing estrogenic material for local application are available. The amount of estrogenic substance needed to give relief in the vaginal afflictions of older women will depend on the individual response.

Progesterone: This secretion elaborated by the corpus luteum of the ovary may be obtained as an extract of animal tissue. A synthetic product similar in activity to the former is also available.

The concentration of progesterone in the body is highest early in pregnancy and removal of the corpus luteum at that time will cause abortion. These facts make it logical to expect that treatment of threatened and habitual abortion with corpus luteum preparations should be attended with considerable success. This has been borne out by many reports in the literature, and certainly we would be derelict in our duty not to

advise its trial in such cases. The usual dose of one or two units every two or three days, however, is entirely too small; larger dosages of 5 units every other day would seem more rational. It is not a panacea, perhaps because more often a defective ovum or thyroid deficiency rather than a lack of the corpus luteum hormone is at fault.

Primary dysmenorrhea is supposed to respond to progestational therapy. In several instances we have administered up to thirty units during the days preceding the onset of menstruation and have succeeded in delaying the flow but have not materially helped the cramps. Here again, based on experimental evidence, we must continue to hope that adequate trial will overcome these earlier personal disappointments, but at the present time its use in dysmenorrhea is far from specific.

It has been hoped that progesterone would help in the control of functional uterine bleeding. It should do so. It is quite possible that lack of success here, as well as in the treatment of dysmenorrhea and abortion, is due to our failure to give large enough doses of the hormone. Most of the ampoules are in one or two unit amounts, but proluton is marketed in the larger 5 unit size.

NEW SUBSTANCES RECENTLY UTILIZED IN GYNECOLOGICAL ENDOCRINOTHERAPY

(1) *Stilboestrol.* This is a chemical substance having an estrogenic-like action, but it is not related in formula to the estrogens found in nature. In women and in laboratory animals it will bring about most of the phenomena resulting from the ovarian follicular extracts. Its only evident advantage is inexpensiveness. It will, in a considerable percent of women, produce marked gastrointestinal disturbances. Experimental evidence has been brought forth to suggest that liver and kidney damage have followed the administration of massive doses in laboratory animals. If these adverse factors can be eliminated, stilboestrol will be a great boon to those who have difficulty in paying the high prices now asked for most commercial estrogens. It is, so far, not available commercially.

(2) *Anhydroxyprogesterone.* This is a synthetic progestational (corpus luteum-like) substance, presumably effective by mouth. It is not yet on the market. We have been able to produce endometrial activity in castrated rabbits by the oral administration of this material and have used it in a few clinical problems, especially uterine bleeding in young girls and threatened abortion. While it is too soon to speak authoritatively, it seems to offer promise. We have found no evidence of any toxic effect which some workers suggest may follow the giving of anhydroxyprogesterone.

(3) *Male sex hormone:* Testosterone propionate has been given considerable trial in the last three years in gynecology particularly for functional uterine bleeding, menopausal disturbances, and certain mastopathies. Decreased genital activity with resultant inhibition of bleeding, depression of ovarian function which may cause breast pain, and lessened menopausal disturbances all follow lowering of pituitary activity after injections of testosterone. We have been investigating its gynecological application experimentally and clinically at Northwestern University Medical School. It has a real place in the non-surgical treatment of functional menorrhagia and perhaps in breast pain. Its use in dysmenorrhea and the menopause seem unwarranted. The large doses required to control uterine bleeding (usually 25 mgs. intramuscularly every other day for ten to fourteen injections) may possibly produce temporary masculinizing changes. Women who have android characteristics such as facial or chest hair, deeply pitched voices or unusually large clitoridal organs should be treated in some other manner. The disadvantage of possible temporary masculinization, of the high cost of medication, and the fact that the treatment is inhibitory rather than curative is to a large extent balanced by the advantages that the treatment is ambulatory, carries no surgical risk, and that whatever reproductive ability the patient has is preserved.

THYROID SUBSTANCE IN GYNECOLOGICAL ENDOCRINOTHERAPY

The sheet-anchor of gynecological endocrine therapy is desiccated thyroid substance. The thyroid gland definitely, although somewhat obscurely, plays a major role in genital activity. Some interesting work has been done to indicate that the pituitary changes histologically after thyroidectomy and it may well be that the effect of thyroid substance is to whip the pituitary rather than act on the ovary directly. Whatever the reason, there is no glandular medication so valuable in our field.

The treatment of sterility cases is never adequately completed until a basal metabolic rate has been done and a blood cholesterol determination made. We have found a surprising incidence of definite lowering of the basal rate in women who are apparently otherwise fertile and pregnancy has resulted after this deficiency has been corrected. It is our practice to administer, when possible, daily one-half grain doses of the substance even when the basal rate is within normal limits. Husbands whose sperm has been studied and who are found to have low sperm counts and unusually large numbers of abnormal types of spermatozoa will sometimes improve on thyroid, given under basal metabolic rate control.

Functional uterine bleeding will often be immeasurably benefited by thyroid therapy. This is particularly true of that group of patients who bleed too long and too much at each menstruation but who do not bleed constantly. After ruling out other organic causes for the flow, the administration of thyroid to the point of tolerance should be instituted in addition to other appropriate measures.

Habitual and threatened abortion are always

distressing problems and, unfortunately, are all too frequent. So strong is our feeling about the efficacy of thyroid in stimulating genital function that we believe that nearly all obstetrical and every habitual abortion patient who can tolerate even such small doses of thyroid as one-fourth grain daily should receive it. The incidence of miscarriage in our patients when so treated is gratifyingly low, and I can recall four women during the past year who miscarried within a few weeks after stopping their medication through misunderstanding or carelessness.

In the menopause, thyroid tends to abet the efficaciousness of the estrogens; and in so-called "ovarian pains," particularly those occuring near the time of ovulation, thyroid seems of definite value.

No more exasperating lesion can be brought to a gynecologist than a case of intractable pruritus vulvae which has been shown not to be due to yeast infection, senile changes with associated estrogenic deficiency, or irritation from local causes such as a macerating leukorrheal discharge. In these cases of idiopathic pruritus a basal rate should always be obtained. It is often low. Even when it is normal, thyroid therapy will give gratifying results in a worthwhile percentage of women.

SUMMARY

In summary, it may be said that our abuses of endocrine therapy in gynecology consist largely in the misapplication of materials whose action is not yet fully understood. This applies particularly to the anterior pituitary factors. We also tend to accept statements or premature reports as to the value of some glandular extract in a certain condition, only to be disappointed in the effect. An excellent example is the use of ovarian follicular preparations in functional uterine bleeding.

Estrogens and desiccated thyroid are of unquestionable value in our work. As we learn more about progesterone, we will find it of increasing importance.

New products which have appeared recently are of promise and each year should bring improvement in them.

ABSTRACTS

MIGRAINE ISN'T DUE TO LIVER DISEASE

Disease of the liver and its ducts, commonly blamed by patients with migraine as a cause of their distress, is not responsible for this condition and may even have a beneficial effect on its symptoms, Carl G. Morlock, M.D., and Walter C. Alvarez, M.D., Rochester, Minn., declare in *The Journal of the American Medical Association* for May 4 on the basis of their study of the history of 431 cases.

The appearance of bile during vomiting in migraine has led many patients to believe that the seat of the trouble must be in the liver. Actually the vomiting of bile may mean only that before or during the act there was reverse peristalsis or wave-like contractions in the upper part of the small bowel, a phenomenon common in vomiting regardless of the cause.

A search of the histories of 215 patients with definite liver diseases showed migraine in only sixteen, or 7.5 per cent. In order to get a control series, the histories of 216 patients, selected only so far as they did not reveal liver disturbances, were studied. Fourteen per cent of these patients had migraine.

"The figures certainly do not support the idea that disease of the liver is the cause of migraine," the authors declare. "If they indicate anything, it is that disease of the liver protects the patient from migraine." This hypothesis is supported by a careful study of the sixteen cases in which migraine and liver disease were associated, revealing that in eight the migraine either disappeared or became less severe after the disease in the liver made its appearance.

VACCINE TO PREVENT WHOOPING COUGH

Only five out of sixty-four directly exposed children who had been given whooping cough vaccine contracted the disease as compared to forty-four victims out of forty-five other children in the same families, also directly exposed but not given the vaccine, Charlotte Singer-Brooks, M.D., San Francisco, reports in *The Journal of the American Medical Association* for May 4.

Her paper cites the results of a study of whooping cough prevention carried on in San Francisco since March 1935. The vaccine was administered to a total of 330 children, but of these only the sixty-four mentioned above were known to be directly exposed to the disease. Thus the vaccine may have protected some other children whose exposure could not be verified.

The duration of the immunity induced by the vaccine cannot be determined until the study has been continued for a longer period, Dr. Singer-Brooks says. "It is well known," she states, "that an attack of whooping cough does not necessarily confer a lasting or absolute immunity to the disease, and a lasting or absolute resistance from vaccine immunization is not expected.

"The duration of protection following immunization with whooping cough vaccine will probably depend in large measure on the complicated immunity mechanism of each individual host and perhaps on silent infection following exposure to a highly virulent phase of the disease at a time when resistance is high. Repeated exposure to less virulent infection at longer intervals after immunization also may act as a stimulus in increasing resistance to the disease."

The author points out that a final evaluation of the results of vaccination is dependent on many factors in which there is wide variation or which it is difficult to measure accurately. These include possible natural immunity in some children, the age of the child at exposure, the extent of exposure, the severity of the attack, unrecognized exposure and the incidence of the disease in the community.

ADVISE TESTS FOR PRENATAL SYPHILIS FOR ALL CHILDREN IN DISPENSARIES

Routine blood tests for prenatal or inherited syphilis are recommended for children's dispensaries or hospitals by Willie Mae Clifton, M.D., and Mary O. Heinz, B.A., Chicago, in *The Journal of the American Medical Association* for May 4.

They report an incidence of 0.46 per cent in 5,625 children from 1 day to 13 years of age. These 5,625 children, twenty-six with prenatal syphilis, were seen by the authors during a period of one year at the clinic for sick children of the Children's Memorial Hospital.

Separating the children as to race, they found that only 3.3 per cent or 185 of the total clinic population were Negro children and of these 2.7 per cent had prenatal syphilis, making the incidence among white children 0.4 per cent.

BLOOD TRANSFUSIONS IN INFANTS: A SIMPLIFIED SCALP VEIN METHOD

SIDNEY A. KAUFFMAN, M.D.
INDIANAPOLIS

The value of intravenous fluids and blood transfusions in acute infections, hemorrhage, and nutritional disturbances in infants and children is reflected in the increasing use of these agents in modern pediatric therapy.[1] Although numerous references to blood transfusion may be found in ancient Egyptian, Greek and Roman medical history,[2] it is most unlikely that the procedure, as we understand it today, was accomplished before the discovery of the blood circulation by William Harvey[3] in 1628. From the time Richard Lower[4] in 1665 performed the first successful transfusion of homologous blood between dogs until the epochal contribution of Landsteiner[5] and Shattuck[6] in 1900, and later Jansky[7] and Moss[8] on the four blood groups, we find the repeated defeats attending transfusion of heterogenous blood between animal and man, and between human subjects of dissimilar groups. It naturally follows that the development of blood transfusion techniques postdates these latter discoveries and, therefore, is a relatively new and changeable therapeutic application, still in its infancy.

Pediatrics as a specialty has paralleled chronologically this procedure. Before the turn of the present century, pediatric practice lay in the realm of the so-called general practitioner, nee "family doctor," and resolved itself chiefly into palpation of the child's pulse, observation of the tongue, administration of an evacuant dose of castor oil, and an occasional temperature recording. Thus the older child was treated. Infants were still in the realm of the unknown, regarded with much of the fear which even now fills the medical student and student nurse on their first visit to the cribside of the new-born. But this is not the case today. The past four decades have seen the birth of pediatrics as a specialty in its own right, founded upon solid years of research and tried procedures, with the result that today it may be called the internal medicine of infants and children. The time devoted to pediatric teaching in medical schools, in research, dietetics and nutrition; the vast number of commercial concerns devoting their efforts solely to the production of infants' foods and biologicals; the evolution of the pediatrician as a product of specialized hospital training, and the pediatric nurse likewise; the insurmountable array of pediatric textbooks and literature which endlessly accumulates, are proof enough of the importance of this branch of medical practice. Furthermore, one could add the work of the Children's Bureau of the U. S. Department of Labor, the various State Bureas of Maternal and Child Health over the country, and the plans of the President and the American Medical Association for the extension of medical service along these lines.

Parenthetically, according to Dr. Wilburt C. Davison,[9] professor of pediatrics at Duke University, pediatrists as such have come and are now going; he presages us as future child health supervisors, as it were, with a sprinkling of consultants, such is the widespread teaching of child care, feeding and prophylactic inoculation. But we take exception to this attitude and feel that pediatrics is as much a specialty as surgery, for example; it requires the services of those interested at all times in its welfare and progress, and thereby equipped to handle the problems and procedures peculiar to the efficient care of the infant and child, the *growing* human being.

Forthwith, this brings us to the purpose of the present article, viz., the simplification of a procedure which, in the growth of pediatric practice, evolved from no procedure at all to one rarely attempted by the surgeon with a complicated technique, finally to an everyday adjunct to therapy—namely, intravenous administration of whole blood, blood plasma, serum, and parenteral fluids.

Aside from the usual indications for which blood transfusions are given, from past experimental[10, 11] and clinical evidence, there are various conditions which now place the exhibition of whole blood and/or its separate constituents on a more rational basis. In acute and chronic blood loss, intravenous replacement of erythrocytes in their normal plasma menstruum is specific. In burns[12] and traumatic shock[13] without appreciable loss of cellular ele-

[1] Kauffman, S. A. & Levinson, S. O.: A Simplified Method for Scalp Vein Transfusions in Infants, *J. Pediat.* **15**:574 (Oct) 1939.

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[9] Davison, W. C.: The Future of American Pediatrics. *J. Pediat.* **14**:810, (June) 1939.

[10] Mann, F. C.: Studies on experimental shock. *Am. J. Physiol.* **47**:231, 1918, etc.

[11] Blalock, A. et al.: Experimental shock. I-X, *Arch. Surg.*, **15**:762, (Nov) 1927 to 22:598, (April) 1931.

[12] Trusler, H. M., Egbert, H. L. & Williams, H. S.: Burn Shock: Water Intoxication as a Complication. *J.A.M.A.* **113**:2207, (Dec) 1939.

[13] Strumia, Max M., Wagner, J. A., and Monaghan, J. F.: The use of citrated plasma in the treatment of secondary shock. *J.A.M.A.* **114**:1337 (April 6) 1940.

ments, but with either transudation of plasma into the injured part or the pooling of large quantities of whole blood in the splanchnic and peripheral circulation, the reduction in dynamic blood volume is quickly restored with plasma or serum transfusions. Here the administration of plasma serves not only to pick up peripherally stagnating erythrocytes, but restores normal oncotic pressure in the capillaries until the circulation stabilizes itself after the insult; and there is evidence[14] indicating that in any such "reflex" shock, whereas whole blood transfusion may actually embarrass the circulation by increasing blood viscosity and peripheral bed stagnation, transfusion of serum or plasma alone restores normal blood pressure and cardiovascular efficiency. In this instance, serum apparently is as effective as plasma, since the fibrinogen content of the latter is a small part of the total plasma protein and is not needed for its clotting properties, and one may follow with matched blood transfusion while the patient is recovering from the shock state. Further, there are conditions with depletion of plasma protein where its replacement often turns the tide of the illness, such as nephrosis,[15] nutritional edema, and chronic wasting diseases.

There is an increasing wealth of clinical trial supporting the immunological properties of pooled human convalescent serum therapy in various infectious diseases,[16, 17] therapeutically in scarlet fever, erysipelas, poliomyelitis and pertussis, and prophylactically in scarlet fever, mumps and varicella. In streptococcic infections of the upper respiratory tract and in the more malignant pneumonias, meningitis, osteomyelitis, septicemia, etc., sulfanilamide compounds leave much to be desired, and convalescent scarlet fever serum[18] presents a dramatic yet innocuous agent in the refractive patient; it may be given intravenously without the least reaction, and in children, especially, repeated injections do not sensitize the patient to animal protein found in various antitoxins. Finally, although pooled convalescent serum and pooled normal serum are to be preferred in a diversified group of conditions, transfusions of whole blood or intramuscular injections of whole blood from immune adults stand second in choice where the former are not available. In cases where citrated blood is stored and not used, before hemolysis occurs (i.e., under 72 hours), the plasma may be decanted and saved. Thus, it is fair to conclude that the apparent levity of indication with which pediatricians have used repeated transfusions in infants and children may now be justified on the basis of their immunological attributes, if not on the basis of previous clinical experience and response alone.

Due to the small size and relative inaccessibility of the infant's peripheral veins, and the consequent patience required to perform venipuncture, various other parenteral routes have been used for replacement fluid therapy, e.g., subcutaneous, intramuscular, and intraperitoneal. These are still satisfactory when indicated. However, in the transfusion of blood, we are limited by the available superficial veins, viz., the scalp, the external jugular, the antecubital, the tiny tributaries on the dorsal surfaces of the hands and the volar surfaces of the wrists, the ankle vein (saphena magna) lying just in front of the internal malleolus of the tibia, and rarely the longitudinal sinus. These veins are all available, provided the large amount of subcutaneous fat in the infant does not obscure them and the part can be immobilized, in which case one may expose the vein and anchor a cannula according to the technique of Spivek,[19] except, of course, the longitudinal sinus, the external jugular and the scalp veins. This method so facilitated the procedure that ankle infusions and transfusions have become very common. Frequent objections raised to this "cut-down" method have been that it required a skin incision, with its potential dangers of infection, and the likely loss of the vein either through thrombosis or ligation, as is frequently done. This latter objection is particularly serious in cases of sepsis or anemia requiring repeated transfusions and where an available supply of veins must be maintained. Nevertheless, the "cut-down" technique is without equal in its speed and simplicity, particularly in patients requiring continuous and prolonged fluid and blood administration.

In many hospitals puncture of scalp veins and other small peripheral veins mentioned has been employed in the infant in preference to cannulation for repeated small infusions and transfusions. This preference is based on the fact that it obviates the objections to venesection and, in addition, spares the ankle and other larger veins as an excellent reserve. With experience and a needle suitable to the size of the vein, one can perform repeated venipuncture and sustain many dehydrated infants by a combination of subcutaneous and scalp vein infusions of glucose-saline or Hartmann's solution until adequate oral intake

[14] Dr. S. O. Levinson: personal communication to the author.

[15] (a) Aldrich, C. A. et al.: Concentrated human blood serum as a diuretic in the treatment of nephrosis. *J.A.M.A.* **111**:129 (July) 1938.

(b) Aldrich, C. A. & Boyle, H. H.: Treatment of peritoneal syndrome and erysipelas-like lesions of the skin in nephrosis (with convalescent erysipelas and scarlet fever serum). *Amer. J. Dis. Child.* **56**:1059 (Nov) 1938.

(c) Aldrich, C. A. and Boyle, H. H.: Concentrated human blood serum as a diuretic in nephrosis. *J.A.M.A.* **114**:1062 (March 23) 1940.

[16] Thalhimer, W. & Levinson, S. O.: Pooled convalescent scarlet fever serum treatment of diverse streptococcic infections. *J.A.M.A.* **105**:864 (Sept) 1935.

[17] Levinson, S. O., Penruddocke, E. & Wolf, A. M.: Human convalescent serum and its application to acute infectious diseases. *Illinois Med. J.* (Dec) 1937.

[18] Hoyne, A. L., Levinson, S. O. & Thalhimer, W.: Convalescent scarlet fever serum: its prophylactic and therapeutic value, a review of 2,875 cases. *J.A.M.A.* **105**:783 (Sept) 1935.

[19] Spivek, M. L.: A simple method of transfusion for infants and children. *J. Pediat.* **7**:199 (Aug) 1935.

is reached. Very often in the nutritional disturbances of infants, accompanied by vomiting, diarrhea, dehydration and acidosis, there is a severe secondary anemia and loss of plasma protein which is not evident due to a marked hemoconcentration. In such cases, then, it is preferable to restore the water and electrolyte balance of the body before giving blood transfusions, as the increased osmotic pressure of the latter would obviously prevent rapid hydration of the tissues. The erythrocyte count and plasma protein determinations are used as an index of blood concentration and serve together with the clinical response as a reliable guide to the infant's need for both parenteral fluid and blood.

The scalp vein in infants lends itself admirably to intravenous fluid and blood administration because it is superficial (superficial temporal vein and tributaries), overlies bone amenable to immobilization by holding the head, and attains fairly good size in most infants, more especially the malnourished and dehydrated. The objections raised in the past to the use of veins about the head have not been substantiated by clinical experience. However, we must be aware of the fact that there are certain difficulties in the use of the scalp vein technique which limit its practicability and resultant widespread use. As with puncture of any small sized vein, considerable patience, skill and adequate assistance are needed. Moreover, since a small calibre needle is required, gravity flow is usually unsuccessful and some method of injection is needed. It is almost impossible to utilize the direct syringe-needle method, because the slightest movement of the child's head causes the needle to slip out of the vein. Ormiston[20] has stressed the value of doing the scalp veins for continuous intravenous administration, relying on gravity for the fluid infusion. Although glucose-saline or similar aqueous solutions may be given by gravity flow for a short time, it has been our experience that this method is successful only with the large size scalp veins, and in the case of blood transfusions is most unsatisfactory.

Though we have been unable to trace accurately the origin of the scalp vein technique, the writer is familiar with the present apparatus in use at several hospitals including the Harriet Lane Home for Children of the Johns Hopkins Hospital and the Pediatric Service of the New Haven Hospital of Yale University. This consists of a three-way stop-cock double syringe burette outfit[14, 21] with which the infusion of blood is accomplished through an injection syringe attached to the system at a distance from the scalp needle. The nurse assists by operating the side-arm syringe with multiple aspirations from the burette and injections into the tube leading to the vein, after one has performed the venipuncture. A second assistant immobilizes the head of the infant, previously "mummied." This apparatus requires skillful manipulation in order to work successfully and has the following undesirable features:

1. Many items of equipment with their attendant expense and breakage.
2. Great care necessary to maintain airtight glass-rubber junctions.
3. Time needed in cleaning, assembling and sterilizing many parts.
4. Necessity of an additional assistant to operate the aspiration-injection syringe.

In order to obviate these disadvantages to scalp vein transfusions and to simplify the technique so that it becomes practical, we conceived the idea of an outfit[22] with a single rubber tubing leading from burette to scalp needle, using a "milking tube" device to propel blood or fluid into the vein. This principle was originally designed and used for direct blood transfusions[23, 24] though it has not attained the popularity of the Kimpton-Brown or stop-cock techniques. Our apparatus presents a modification of that described by C. M. Van Allen.[25] (Fig. 1.) A three roller wheel is used. The rubber tubing is anchored in a curved metal "bed," which in turn is hinged to a central shaft by a pin permitting a rocking movement of the bed, thereby maintaining contact between the tubing and moving rollers at a constant maximum compression and also avoiding creeping of the rubber tubing. The central metal shaft supporting the bed moves in a vertical direction in a sleeve. A strong metal spring at the bottom of the sleeve imparts constant upward pressure. To adjust the rubber tubing in place, the bed system is pushed down and held in a lowered position by engaging with a catch. (Fig. 2.) Now the tubing is placed in the bed, the catch released and the spring raises the bed into apposition with the rollers (Fig. 3). The central wheel with its three rollers is operated by means of a rotating handle which may be attached on either side to a slow and fast ratio gear for variation in speed of administration. The slower gear ratio is used for the average intravenous infusion or transfusion and permits a comfortable rate of speed by turning the operating handle 20-30 revolutions per minute.

The only equipment to be assembled and sterilized is a 250 cc. burette with gauze stopper which is suspended from a vertical rod, about 2 feet of transparent rubber intravenous tubing, glass adapter and scalp needle.

[20] Ormiston, G.: Transfusion of blood and other fluids in infancy. *Lancet* **1**:82 (Jan) 1938.

[21] Powers, G. F.: Blood transfusion as a therapeutic procedure, in Brennemann's Practice of Pediatrics vol. 1, chap. 14:6 1938. W. F. Prior Co., Hagerstown, Md. publishers.

[22] Manufactured by the Hospital Equipment Corp., 5011 N. California Avenue, Chicago, Ill.

[23] Beck, A.: Ergebn. d. inn. *Med. u. Kinderh.* **30**:150 1926.

[24] DeBakey, M.: A simple continuous-flow blood transfusion treatment. *New Orleans M.S.J.* **87**:386 (Dec) 1934.

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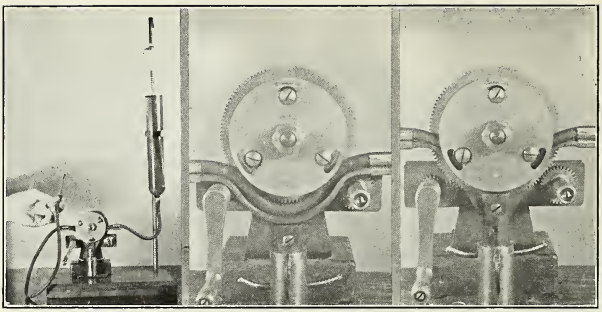


Figure 1 Figure 2 Figure 3

Plate loaned by The Journal of Pediatrics

When a transfusion is to be given, a small amount of sterile physiological saline is poured into the burette, the rubber tubing with glass adapter and needle filled so as to avoid air bubbles, and placed into the bed of the machine. Now the catch is released, bringing the tubing in apposition with and compression by the rollers (Fig. 3). The citrated and previously filtered blood is then poured into the burette and capped with a gauze stopper. Care must be taken to filter the blood well and to add sufficient 2½% sodium citrate, as the smallest clot will readily plug the small needle used. After the infant is "mummied" in a blanket, his head is shaved over the temporal region and the scalp prepared with iodine and alcohol. A nurse holds the head firmly and with her thumb compresses the superficial temporal vein anteriorly to the tragus of the ear. Friction and gentle tapping with a sponge usually makes the vein sufficiently prominent. The needle is inserted into the vein in a caudad direction. Blood usually appears in the glass adapter as soon as the needle penetrates the vein. If this does not occur, a one-half reverse turn of the handle of the apparatus produces enough suction to aspirate blood into the glass adapter, although blood may not be withdrawn from a very small vein. The needle is now held in place by the index finger of the left hand over the point of its insertion into the scalp, and by turning the handle of the machine with the right hand, at a comfortable rate (about 30 revolutions per minute), blood is "milked" into the vein at an infusion rate of 10-15 cc. per minute.

The volume of blood usually administered to infants and children, which is purely empirical, is generally calculated at from 10-20 cc. per kilogram body weight (5-10 cc. per pound); the larger the child, the smaller the volume used in proportion to total body weight. Powers[21] recommends a maximum dose of blood of 40 cc. per kilogram (20 cc. per pound) in infancy, but one rarely exceeds the figures given as it is preferable, in lieu of any reaction, to repeat the transfusion rather than replace one-third or more of the total blood volume (approximately 15% of body weight) at a single sitting. It is well to proceed cautiously in cases where the circulation is already embarassed, as in pneumonia and rheumatic heart disease; and he (Power) feels that it is inadvisable and sometimes harmful to transfuse in the blood dyscrasia, such as leukemia and Hodgkin's disease. Intravenous glucose, normal saline, lactate-Ringer's solution and the like are usually given to dehydrated infants in volumes of about 30 cc. per kilogram (15 cc. per pound), although one may give by slow drip venoclysis up to the subcutaneons dose of 60 cc. per kilogram (30 cc. per pound) or over 24 hours the daily fluid requirement of 15% body weight (2½ ounces per pound). In restoring the water and electrolyte balance of a severely dehydrated infant, a rational procedure is to give normal saline solution subcutaneously followed by 10% glucose in distilled water or Hartmann's solution (⅙ molar sodium lactate) intravenously, which, being hypertonic, will help absorb the subcutaneous solution by osmosis and hydrate the tissues more quickly.

We have found that this little instrument described does away with the labor and difficulties of the complicated syringe method, although the time consumed in either case is inversely proportional to the skill acquired in the venipuncture of small calibre veins. A 23 gauge 1¼ inch long needle with short bevel is best adapted for scalp vein puncture, although for tiny veins long hypodermic needles (26-27 gauge, 1 inch long) are more suitable.

As Van Allen has pointed out, this instrument lends itself for other uses where suction and pressure are necessary. The apparatus is portable enough to be taken into the home, and we have used it for home transfusions in children and in the administration of large quantities of intravenous fluid such as human convalescent scarlet fever serum, poliomyelitis serum, lyophile serum and gum acacia. In the latter case, a single rubber

intravenous tubing with adapter and needle at either end is used, one needle being placed into the recipient's vein and the other into the serum vial, thereby eliminating the need for filling burette or multiple syringes. More recently Dr. Levinson et al.,[26] Strumia, Wagner and Monaghan,[13] have stressed the value of large quantities of pooled human serum and citrated plasma as a blood substitute to combat the secondary shock of post-traumatic and post-operative hemorrhage; this outfit could be used admirably for the rapid administration of such serum where gravity flow would be too slow to meet the emergency.

SUMMARY

1. An historical introduction to blood transfusion and pediatric procedure is presented.

2. Specific indications which now place the use of whole blood, blood plasma and pooled human convalescent serum transfusions on a more rational basis have been emphasized.

3. Dosage, uses of and various routes for intravenous administration of blood and parenteral fluids in infants are discussed, as well as the advantages and disadvantages of the scalp vein method.

4. The scalp vein technique is simplified and facilitated by use of a modification of the roller-pressure or "milking tube" device, which has a wide variety of applications.

5. A plea is made for the more widespread familiarity and use of the scalp vein route for blood transfusions, intravenous fluid and serum therapy in infants, thereby saving other available veins as an excellent reserve.

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[26] Levinson, S. O. et al.: Human serum as a blood substitute in the treatment of hemorrhage and shock. *J.A.M.A.* **114**:455 (Feb) 1940.

HEMORRHAGIC ENCEPHALITIS IN AN OBSTETRICAL PATIENT FOLLOWING NEOARSPHENAMINE*

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Of the various manifestations of sensitivity to arsenic in the form of the arsphenamines, the most spectacular is that of acute hemorrhagic encephalitis. Although several cases have been reported as having recovered from this reaction, some writers are of the opinion that the recoveries were not true cases of the condition.[1]

Glaser, Imerman and Imerman[2] in 1935 reported from the literature and from their own experience 158 cases of hemorrhagic encephalitis following intravenous injections of arsphenamine. In this series there was a remarkable similarity in the clinical findings and histories of the cases. They found that 40% of the cases were 20 to 29 years of age. One of the striking points brought out in the analysis of the series was the fact that most of the patients suffering from the condition were having their first experience with arsenic and that comparatively little of the drug had been used. In 53%, 0.05 to 1.1 grams were injected before the onset of symptoms while another 30% received from 1.10 to 2.1 grams. Fifty per cent of the cases had received but two doses of arsphenamine before the onset of symptoms. Eighty-five per cent had symptoms within 72 hours after the last dose had been injected, while 31% had symptoms within 1 to 12 hours. Death occurred before three days in 48%, and 80% showed convulsions. The mortality of cases with central nervous system involvement secondary to the injection of arsphenamine in this series was about 76%.

The review of Plass and Woods[3] is of particular interest in relation to the case to be presented below, because their three cases occurred in young women, two during pregnancy and the third postpartum. In the first case reported the date of the initial luetic infection could not be determined, but the blood serology gave a 4 plus Wassermann reaction. The second case showed no clinical signs of syphilis but the spinal fluid Wassermann was positive. The first case received 2.2 grams of neoarsphenamine over an 18 day period, the second 1.0 grams over a five day period and the third 1.0 grams over a six day period. All three of these patients died within four days after receiving the last dose of neoarsphenamine. An autopsy was performed in the first case and the outstanding pathological findings were acute encephalitis and small punctate hemorrhages in several areas of the cortex of the brain.

CASE HISTORY

Mrs. M. G., age 18, primipara, was first seen in the out-patient prenatal clinic at the William H. Coleman Hospital for Women in Indianapolis on

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Acknowledgment is given Dr. Lynn Arbogast of the Department of Pathology for his work on the gross and microscopic pathological studies of the case.

[1] Blitch: Post-arsenical Hemorrhagic Encephalitis and Report of a Case. *Mil. Surg.* **80** (1937) pp. 385-387.

[2] Plass and Woods: Hemorrhagic Encephalitis (Neoarsphenamine) in Obstetric Patients. *Am. J. Ob. & Gyn.* **29** (1935) pp. 509-517.

[3] Glaser, Imerman and Imerman: So-Called Hemorrhagic Encephalitis and Myelitis Secondary to Intravenous Arsphenamines. *Am. J. Med. Sci.*—189 (1935) pp. 64-79.

January 11, 1938. The last menstrual period had occurred September 9, 1937, and the patient had experienced some nausea but no vomiting during the first trimester. She had had some frontal headaches and some insomnia but these symptoms had been negligible. Routine blood serology drawn at this time was reported to be Wassermann, Kahn, and Kline 4 plus.

The patient was seen a week later, at which time the blood serology was again run and was reported to be 4 plus throughout. A searching history failed to bring out any positive points concerning signs of acquired or congenital syphilis in the patient. Serology drawn on the patient's husband, mother and father were negative. A careful physical examination of the patient failed to reveal any signs of congenital syphilis. No chancre scar was noted.

On January 19, 1938, the patient received two grains of bismuth salicylate in peanut oil intramuscularly. This dose was repeated at weekly intervals until the patient had received seven injections. At no time was any complaint offered concerning subjective symptoms following these injections. The last injection of bismuth was given on March 9, 1938, and on March 16, 1938, 0.45 grams of neoarsphenamine were given intravenously. The following week, March 23, 1938, the patient returned to the clinic and reported no untoward effects of the neoarsphenamine injection. The blood pressure at this time was 90/58 and there was a slight edema of the feet noticed by the patient in the evening. The urine showed a slight trace of albumen, a finding which had been present at the last two visits to the clinic. Consequently, 0.45 grams of neoarsphenamine were given again.

The patient was brought to the admitting room on March 25, 1938, two days after her last clinic visit, because of disorientation and mental confusion which had begun that morning. The history obtained from the husband was to the effect that on the evening of March 23, 1938, approximately eight hours after receiving 0.45 grams of neoarsphenamine, the patient complained of feeling hot and cold in alternating periods. During the following day she had chills, but the advice of a physician was not sought. There were no mental aberrations at this time.

When the husband left home for work at 6:30 a.m. on March 25, 1938, the patient still complained of the chilly sensations but was lucid. At 9:30 a.m. a neighbor dropped in to see the patient and found her gazing dully in front of her. She did not respond to questions and seemed to be unable to recognize her friend.

Physical examination on admission to the hospital revealed a white female, apparently quite ill. She was unable to stand alone, muttered to herself, and did not answer questions. The skin was pale, cold and clammy and there was a circumoral pallor. There was some twitching of the extremities. The temperature was 98 rectally, pulse 100, respirations 30. Blood pressure was 122/60. The face and hands were quite edematous. She was at once taken to the ward and in one hour had a convulsion while a perineal preparation was being done. The seizure lasted 45 to 60 seconds and was generalized and clonic in character. It began with a shaking of the right arm and leg and quickly became generalized. The patient bit her tongue before a mouth gag could be inserted. The eyes showed alternating vertical and horizontal nystagmus and the pupils alternately were fixed to light and reacted. Ophthalmoscopic examination showed no choking of the discs and there were no retinal hemorrhages or exudates. No jaundice was noted. The deep reflexes were hyperactive and there was a non-sustained ankle clonus. The convulsion was apparently controlled with 7½ grains of sodium amytal intramuscularly. Glucose 100 cc., 50% solution, was given intravenously.

One hour following the first convulsion, another of exactly the same type occurred. Morphine sulphate, gr. ¼, was given and a spinal puncture was done after the convulsion had been controlled. The spinal fluid pressure was 10 mm. of mercury and the Queckenstedt test was negative bilaterally.

During the next twenty-four hours the patient had eleven convulsions of varying severity. On three occasions it was noted that the patient was in opisthotonus during a seizure. The temperature rose gradually until it reached 107.8 terminally. Supportive therapy consisting of intravenous glucose, digitalis and coramine hypodermically failed to cause much change. Sodium iodide was also given in a 60 grain dose intravenously.

On the day following admission another neurological examination was made. At this time it was discovered that the limbs were flaccid with no defense movement in either arm. The plantar reflex was very faintly obtained in flexion on the right and left. The biceps reflexes were absent bilaterally. Knee-jerks and ankle jerks were absent bilaterally. There was no neck rigidity. There was no blink reflex in either eye and only slight corneal reflex. No abdominal or epigastric reflex was noted.

Electro-cardiograms taken during two convulsions showed only a depression of the ST segments in all leads. The PR interval was not lengthened. A bed-side x-ray showed some hilar increase and generalized mottling throughout the lung fields. This film was taken after the patient had vomited considerably and apparently had aspirated some of the vomitus.

Laboratory work showed the following: R.B.C. 4,150,000 with Hbg. of 10, W.B.C. 8,600, 71 polys, 23 lymphocytes, 4 stab cells and 2 large monocytes. Catheterized urine showed a trace of albumen, a few red cells, no casts. Blood total non-protein nitrogen 23 mg., sugar 105 mg., uric acid 3.9 mg., creatinine 1.2 mg., blood calcium 11.0 mg. The blood culture was negative. The spinal fluid was

negative for organisms on direct smear and culture. The cell count was 13 with no red blood cells present. A slight trace of globulin was present, sugar was 67 mg., and protein 208 mg. The gold curve was 10 zeros.

Death occurred 24 hours after the admission of the patient to the hospital and 72 hours after she received her last dose of neoarsphenamine. An autopsy was performed.

Histological examination of the brain showed peri-capillary edema. There was an associated pericapillary inflammatory reaction, predominantly of the large mononuclear variety, although some polymorphonuclears were present. The annular pericapillary hemorrhages typical of post-arsenical encephalorrhagia, as described by Globus and Ginsberg[4] were seen in but two areas. Instead of well preserved red cells, yellow brown blood pigment was seen. Numbers of capillary vessels were thrombosed. Changes were limited to the white matter, the cortex and meninges showing no detectable abnormalities.

Grossly, the dura was smooth and of normal thickness. The vessels over the cortex were markedly congested.

[4] Globus and Ginsberg: *Arch. Neur. & Psych.*, **30**: 1226-1247, (December) 1933.

SUMMARY

A case of hemorrhagic encephalitis in a pregnant patient following neoarsphenamine, with fatal termination, is reported.

A total dose of 0.9 gm. of neoarsphenamine was used over an 8 day period. This was the patient's first experience with arsenic.

Symptoms of chills and fever occurred eight hours after the second injection of neoarsphenamine, followed by convulsions in 48 hours and death in 72 hours.

Autopsy revealed the pericapillary pathology described in other cases of hemorrhagic encephalitis following arsenic.

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SUMMER AIR CONDITIONING

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"Everybody is always talking about the weather but nobody ever does anything about it." This quotation of Mark Twain's is definitely dated. We are doing something about it and on a rather large scale. Though the latter half of the quotation is no longer true, "Everybody" still "is talking about the weather"—the new manufactured weather.

The remarks I have heard from many of my friends on entering summer air conditioned theatres, restaurants and stores have stimulated me to investigate the comfort and health factors involved in summer air conditioning. While many of these expressions have been ones of gratitude for the brief respite from excessive heat or "humidity," yet misgivings also were expressed as to whether or not it might be detrimental to health. Frequently such exclamations as, "I wish they wouldn't keep it so cold in here—I'm chilled clear through," or "I'll have a cold tomorrow from this running in and out of cold places" are heard. A year ago this past summer a business executive, who was called upon to leave his air conditioned quarters several times a day, developed a moderately severe pneumonia during a particularly hot spell. Both he and his physician felt that these sudden changes were likely a predisposing cause.

Further evidence, of a more exact nature, that there are objections to summer air conditioning is furnished by the studies of Houghton, Newton, et al.[1] They found by the questionnaire method that of 274 office workers, 31.7% gave answers indicating poor reactions to the conditioning existing in their office (this office was that of one of the large manufacturers of air conditioning equipment). What these reactions were is indicated in the diagram. It is worth noting that while 0.9% of the 66.1% whose reactions were good stated they had fewer colds, 3.1% of the 31.7% whose reactions were not good contracted colds.

Petersen[2] says: "The only real insult offered the population by the air conditioning engineer is the vast differential that exists at certain times between the outside temperature and the designed indoor air temperature: under present practice this may vary by as much as 30° F. Physiologically this is preposterous. While within the range of adaptation for the perfectly normal individual, it involves a definite metabolic strain and can be harmful for a considerable group of subjects."

"The vasomotor crisis associated with the rapid adjustment necessary under such conditions may (a) cause an increased susceptibility to infection, (b) result in gastro-intestinal disturbance, (c) precipitate acute dysfunction in organs that are inadequate."

"The reversal from a sojourn in an air conditioned (cool) environment of this type to the hot,

[1] Houghton, Newton, et al: General Reactions of 274 Office Workers to Summer Cooling and Air Conditioning. *Heating, Piping and Air Conditioning, 10,* 552 (Aug.) 1938.

Newton, Houghton, et al: Summer Cooling Requirements of 275 Workers in an Air Conditioned Room. *Ibid. 9,* 758 (Dec.) 1937.

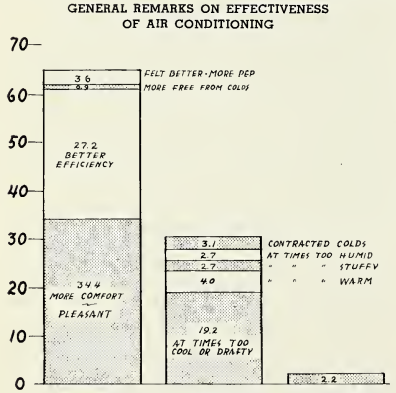
[2] Petersen, Wm. F.: What Weather Does to Man. *Ibid. 10,* 595, (Sept.) 1938.

humid, outside environment will in turn *accentuate* the peripheral dilatation that will normally follow a period of unusual and unseasonal chilling—with resulting excessively low blood pressure, fainting and nausea."

Yaglou[3] believes that "an indoor temperature even 10° to 15° F. below the outside temperature as is now the practice appears to be objectionable and harmful to some persons." Conditions he attributes to over-cooling are similar to those given above by Petersen—headaches, stomach upsets, a general feeling of fatigue and head colds. "Little is known" even in those who seemingly adjust easily and without effects "about possible damage to health that may result from too frequent exposure. Adaptation to summer heat renders the organism sensitive to cold and temperature changes, especially when the body surfaces are wet with perspiration. The cold shock experienced on entering a cooled space on a warm day is due to excessive increase in the heat loss by evaporation of perspiration without an immediate compensatory increase in the metabolic rate. Conversely the feeling of depression and discomfort experienced in passing from a cooled space to warm outdoor air appears to be due to lag in sweat gland activity and consequent retention of body heat."[3]

Enough has been related to indicate that there is good basis for the complaints heard on summer air conditioning—both from the standpoint of comfort and of health. Physicians may expect to be questioned on such matters. What answers can be given?

"Air conditioning is the application of methods of controlling the cleanliness, humidity, temperature and movement of air in buildings to make the air comfortable and healthful and to obtain incidentally indoor conditions that are conducive to efficiency and happiness."[3a] This applied to summer furnishes a good working definition of summer air conditioning. It should not mean simply cooling of the air or control of the temperature which concept "has come to occupy such an inordinately prominent place in the public mind."[4] Indeed it is questionable whether one should speak of summer air conditioning. More properly we should think of it as a year 'round necessity. If so considered, heating is a factor of more importance than cooling.[5] Heating, thought of as an integral part of air conditioning, as well as cooling, will lead to a lower combined cost in the installation and maintenance of air conditioning equipment.[4]



The criterion of the success of a summer conditioning system, as far as the layman is concerned, is that it produces an atmospheric environment to which he is oblivious. While this is an ideal to be earnestly striven for it is obvious that the inherent variability of humans makes its attainment impossible. These variations are more evident in a subjective way than in an objective one. In other words, the subjective reactions of people to summer air conditioning are what we hear about from them. On the other hand, the objective reactions (the physiological adaptations) are of course not evident to them except as they produce subjective symptoms.

To the public and to the air conditioning equipment industry (to a lesser extent) the important thing is the subjective sensation while to the physician and public health officials, the chief concern is with the physiological requirements and the effects on health. As Drinker has pointed out, these physiological requirements "are easier to satisfy than are the esthetic or psychological demands."[6] Such a situation merits and is now receiving the cooperative attention of physicians and engineers.

The following factors may be listed as affecting the comfort and health of people in summer air conditioning:

1. Temperature of the environment (inside and outside)
2. The relative humidity
3. Air movement
4. Cleanliness of the air
5. Radiation
6. Clothing worn

[3] Yaglou, C. P.: Sanitary Aspects of Air Conditioning. *Jrnl. A. P. H. A. 28*, 143 (Feb.) 1938.

[3a] Moyer and Fitz: Air Conditionning. McGraw Hill Co.

[4] Discussion by leading authorities: Air Conditioning for Human Comfort. *Heating, Piping & Air Conditioning. 10*, 763-767, (Dec.) 1938.

[5] Newton, Houghton, et al: Shock Experiences of 275 Workers After Entering and Leaving Cooled and Air Conditioned Offices. *Ibid. 10*, 486 (July) 1938.

[6] Drinker, P.: Air Conditioning in Normal Life. The Environment and Its Effect Upon Man. Harvard University Tercentenary Celebration. Symposium held August 24-29, 1936. Page 231.

7. Acclimatization associated with the season of the year.[7, 8 also 6]
8. Heat production of the individual[7] (closely associated of course with activity and to a lesser degree with diet)

The first seven factors are chiefly concerned with heat loss. Of these eight items, it is obvious that *definite* control can be exerted only on the first four. Drinker[6] states, "By means of modern air conditioning it is possible to attain practically any desired combination of the above factors." (He includes under what I have given as cleanliness of the air: carbon dioxide concentration, odor intensity, dustiness, gas concentrations and degree of ionization. This latter, it is felt though not proven, is what lends to air its quality of freshness. The character of the air after a thunderstorm is familiar to all.)

The interrelationship of all these factors is most complex and, coupled with the variabilities of human beings, makes a solution of the problem peculiarly difficult.

It is generally conceded that the main health consideration in summer air conditioning is to prevent the shock incident to sudden and frequent changes of temperature. To minimize the effects of these: "The solution of the problem would seem to lie in dehydrating the air to a comparatively low humidity, without reducing the temperature more than a few degrees below the prevailing outdoor temperature. In this way temperature contrasts are moderated upon entering and leaving the conditioned space and according to current research, there are no untoward symptoms in the transitional period of readjustment."[3]

As for comfort we must not "expect too great a uniformity in the opinions of impartial subjects as to conditions of comfort or warmth."[6]

Beyond good advice as to proper clothing, diet and activity, there is little we can do with the individual factors concerned in air conditioning.

What guides may we follow in controlling the environmental factors? At the present time the standards as set out by the Association of Heating and Ventilating Engineers may be accepted as the most reliable and authoritative we have. Every health official who may be concerned with air conditioning should have a copy of these recommendations. Their standards take into consideration to the full extent of our present knowledge all the problems involved in comfort and health with air conditioning, i.e., variability in frequency and length of exposure to the conditioned environment as illustrated by comparing the clerk in the store with the shopper who may be in and out of several stores in the course of two or three hours. The American Public Health Association has equally authentic information on the comfort and health aspects of the problem.

This subject should not be concluded without a word or two regarding air cleanliness. With the development of ultra violet light sterilization of air there has come a great hope that it will eventually give us some practical means of reducing morbidity and mortality due to air borne infections. The electric precipitator is also of promise.[9] Air sterilization by ultra violet light is being beneficially utilized at present in hospital surgeries, nurseries and premature cubicles. Opinion differs as regards what we may expect from air conditioning aside from the use of ultra violet sterilization. Certain it is, however, that in selected instances it is of practical value[6, 2, 10, 9], i.e., allergic conditions.

We have considered the possible health hazards connected with summer air conditioning and some of the benefits that may be anticipated in the future with the utilization of known, but still impractical, methods of year 'round air sterilization. Is there any evidence that health or efficiency is benefitted by present summer air conditioning practices? Unfortunately there is little factual material on this. A study[3] by the Metropolitan Life Insurance Company of 6,000 workers revealed "no significant improvement on health or efficiency beyond relieving the depression and discomfort experienced when working without air conditioning installation." More studies of this nature need to be made and are being made.

There is almost universal agreement that summer air conditioning justifies itself in the respite it offers from the depression and discomfort so often accompanying our summer weather. We may confidently expect continued improvement in its application as regards health considerations. Like the automobile in *its* early days, the minor hazards and discomforts of present day air conditioning will not for a moment hinder its ever greater popular acceptance as a necessity.

[7] Research Technical Advisory Committee on Physiological Reactions: Recent Advances in Physiological Knowledge and Their Bearing on Ventilation Practice. Report of American Society of Heating and Ventilating Engineers. *Heating, Piping & Air Conditioning. 11,* 54 (Jan.) 1939.

[8] Giesecke and Bodgett: Seasonal Variations in Effective Temperature Requirements. *Ibid. 10,* 677 (Oct.) 1938.

[9] Danielson, Col. W. A.: Some Recent Research Developments in Air Conditioning. Trans. 5th Ann. Meet. Southern Branch, A. P. H. A., November, 1936, page 63.

[10] Murphy, H. C.: Control of Air-Borne Organisms. *Heating, Piping and Air Conditioning, 10,* 389 (June) 1938.

DO NOT FORGET YOUR
NARCOTIC REGISTRATION.
IT MUST BE FILED BY
JULY 1, 1940.

LABORATORY AIDS IN THE DIAGNOSIS AND TREATMENT OF ABDOMINAL EMERGENCIES*

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It is well to begin a discussion with a definition of the terms employed. The term emergency has been used loosely to mean anything from the most trivial to the most serious of ailments. Strictly speaking, the only real emergencies are those of hemorrhage and asphyxia. Every other ailment allows sufficient time for a careful history, thorough physical examination, and resort to laboratory aid in order that an accurate diagnosis may be established. In addition, such study enables the physician to determine the physical state of the patient in terms of his ability to withstand any surgical procedure that might be indicated.

Many of our medical critics have deplored the fact that the modern physician turns to the laboratory too quickly to make his diagnosis. Perhaps there is merit in this criticism. Every patient must have a careful history of the present and past illness and a careful physical examination. However, it must be admitted that the laboratory can often clear up a diagnosis in a few moments that would be impossible by the most meticulous physical examination known. The object of this paper is to point out a few laboratory procedures which aid the physician in diagnosing and treating acute abdominal disease.

(a.) X-ray. Without x-ray the modern physician is helpless. I need call attention to only a few of its uses in the diagnosis of abdominal emergencies. A flat plate of the abdomen will reveal a gas pattern which indicates the site of the obstruction. This may not only establish the diagnosis but aid the surgeon in making the proper approach to the problem as well.

Recently we have been using the flat plate to diagnose the position of the cecum in acute appendicitis. In this disease the lower ileum and cecum are usually filled with gas due to a reflex paralytic ileus in this region. Frequently the cecum will be found in a high or low position and thereby clear up a problem in diagnosis that does not fit the usual clinical picture. In addition, it enables the surgeon to make the McBurney incision, which he prefers, directly over the cecum and may avoid for him a long and troublesome operation or two incisions.

In infants a flat plate of the abdomen may help determine the position of a blind hind gut in cases of imperforate anus. The infant is turned upside down and placed behind the fluoroscope. By massaging the abdomen, gas may be moved down to the lower-most portion of the gastro-intestinal tract. If the blind hind gut is within reach, the surgeon may plan his operation from below; otherwise, he must use the more hazardous method of approach from above. By placing the patient in the upright position, free air may be seen under the diaphragm and lead to the diagnosis of a ruptured peptic ulcer, or a ruptured gut following trauma to the abdomen in which there may be no external wound. A flat plate, in addition to the above, may reveal the site of extravasated blood, especially post-peritoneal, and explain the picture of hemorrhage which is encountered or the solid organ which has been ruptured or torn.

A barium enema is of great importance as an aid to diagnosis. At the outset, however, one warning should be given and that is that an incomplete obstruction may be converted into a complete one in the large bowel by the impaction of barium which is injected under pressure. Therefore, a thin mixture should be used and only a small amount of pressure exerted. The site of obstruction, the presence of new growths, the presence of such entities as terminal ileitis or diaphragmatic hernia with obstruction, can often be diagnosed only by the barium enema. In addition, intussusception may not only be diagnosed but actually cured by using the barium enema and massaging the abdomen under the fluoroscope.

(b.) Urinalysis. A routine urinalysis is imperative in making the diagnosis in an abdominal emergency. It is well to remember that an approaching diabetic coma may simulate an acute abdominal lesion, especially in children. Blood in the urine leads to suspicion of kidney colic due to stone. Pus usually indicates a pyelitis which may also simulate appendicitis in children. Occasionally pus is found due to a ureteritis caused by an inflamed retrocecal appendix. The presence of acetone indicates a state of starvation in the patient; the acidosis must be corrected before surgery is instituted.

(c.) A study of the blood is now a routine requirement in all hospitals. Repeated blood counts properly interpreted may lead not only to correct diagnosis, but an estimation of the ability of the patient to withstand surgery and aid in the prognosis as well. On two occasions we have encountered a leukemia in children with suspected appendicitis. An unnecessary operation and the danger of post-operative hemorrhage was avoided by making a white count. In addition, the high count of an acute intestinal obstruction, where there is no fever and an especially high count in mesenteric thrombosis, often leads to the correct diagnosis. Repeated white counts, especially the

* Abstract of address delivered before the Lafayette Academy of Medicine, Lafayette, Indiana, February 27, 1940.

differential, may be used to interpret the progress of the disease. It is perhaps superfluous to recall the importance of the Schilling count. The number of immature cells such as bands, stabs and metamyelocytes should not normally increase above 10%. To do so implies what is commonly known as a shift to the left and indicates that the patient, having exhausted the supply of mature cells, is fighting a losing battle with immature ones and needs the aid of transfusion. The proportion of polymorphonuclear leukocytes to the total white count is also an aid in prognosis—this is known as Walker's Index. That is, the total white count in general indicates the resistance of the patient, whereas the percentage of polymorphs indicates the virulence of the organism and for every 1% rise in polymorphs there should be one thousand cells ready to defend the body. Using this as a fraction and using 10,000 (above the line) as the normal average white count and 70% as the normal percentage of polymorphs (below the line) a fraction less than one would indicate a poor general resistance and a virulent infection, whereas a fraction of more than one would indicate the reverse. One blood count cannot be relied upon and, therefore, it is wise to repeat the counts at frequent intervals.

In the past we have paid very little attention to the red blood count, although this is as important to the surgeon as the white count, not only in the diagnosis of disease but also as to the ability of the patient to withstand surgery. For example, immediately after a profuse hemorrhage, the red blood count will be normal; within an hour and a half it will be very low with a low hemoglobin. In states of dehydration, starvation or the loss of plasma in shock or diffuse inflammation, there will be a hemoconcentration due to the loss of plasma or water. A profoundly sick patient may have a blood count of five or six million with a hemoglobin of 100%. This may lead the unwary to believe that the patient will withstand surgery well. but as a matter of fact he is probably dehydrated or has lost a large quantity of blood plasma and will withstand surgery poorly without blood transfusions and intravenous medication.

Dehydration has been stressed so much in recent years that we have come to believe that a patient must have intravenous medication before anything else is done. Really, one is led to believe that the veins rather than the gastro-intestinal tract were meant for drinking. This is a hazardous concept because intravenous salt solution, though harmless in the normal person, may be dangerous in the presence of leaky capillaries made so by diffuse inflammation, whether bacterial, traumatic, thermal or chemical, or caused by stagnant anoxia as seen in cardiac failure. A disregard for the above leads to a transudation of the injected fluid through the permeable capillaries into diseased areas. Moreover, due to the stagnant anoxia and loss of blood plasma (which is increased as transudation increases), capillaries all over the body become more permeable and fluid collects in the lungs, brain, and other vital organs causing edema and even death (water intoxication). When fluids are administered in these conditions, an adequate amount of plasma must also be given. This increases the osmotic index of the blood and tends to hold fluid within the capillaries. True enough, some of the plasma will be lost into the injured zone but not elsewhere. Soon localization occurs, however, and the affected capillaries become thrombosed, causing a retention of plasma. *Therefore, it may be said that intravenous fluids should not be given without first ascertaining the degree of hemoconcentration.* The best method would be to determine the hematocrit, that is, the proportion of plasma to cells. Normally there should be 55% plasma and 45% cells. An increase in cells shows hemoconcentration. The serum proteins may also be determined. Normally they should be 7.1 grams per 100 cc. Less than 5 grams per 100 cc. gives rise to edema because of the decreased osmotic index of the blood. The specific gravity of the blood may also be used. However, for practical purposes, an accurate red blood count and hemoglobin determination is all that is necessary to estimate the degree of plasma depletion.

Occasionally tests are made that are not routine. Such is the test for diastase in the presence of a probable acute pancreatitis. The normal diastase of the blood should be between 70 and 200 mgm. per 100 cc. of sugar. In an acute pancreatitis this is greatly increased. Routine Kline and Kahn tests are done to help rule out a tabetic crisis.

This is, perforce, a more or less wandering discussion in which many clinical entities have been tripped over lightly, but which at the bedside are stumbling stones to diagnosis. The most that can be expected in some cases is that the physician shall decide that here is a condition for the relief of which immediate surgery is indicated; or here is a disease that may well be handled by medical treatment, or at least by symptomatic treatment until the diagnosis can be established. However, in addition he must be able to decide whether or not the patient will withstand the procedure necessary to alleviate his suffering, for there is no operation that has merit enough to be used on a patient who cannot stand it. Deflation of the distended loops of bowel in intestinal obstruction, for example, may mean the difference between success and failure from the ensuing operation. The physician must stick to routine and be methodical in his approach to the solution of the disease at hand for the more certain the diagnosis, the less surgery will be necessary and the more certain will be the cure.

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A.M.A. MEETING—NEW YORK—JUNE 10-14

THE MANAGEMENT OF THE TWO MOST COMMON DISEASES OF THE SKIN*

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Acne vulgaris and dermatophytosis are inevitably encountered in every general practice because today they are the two most common skin diseases.

ACNE VULGARIS

Acne vulgaris is seldom seen in early childhood and usually appears at the age of puberty. This and other facts are the basis for the belief that acne is caused by an imbalance of the endocrine system with the gonads as the most likely causative glands. Despite the recognition of the role of the endocrine glands in the production of acne vulgaris, no present method of glandular therapy has proven itself of value in the treatment of this condition. Both follicular hormone and anterior pituitary-like hormone have been disappointing. There are many reports in the literature of the excellent results achieved by the administration of manganese, tin and yeast, but they, too, have been disappointing.

X-ray therapy is perhaps the best and most reliable means of curing acne. This modality alone exceeds all others in its therapeutic effectiveness, and as practiced by the well trained dermatologist is without danger. This is the proper place to state that x-ray treatment of acne should never be undertaken without the special training, technic, and apparatus required.

Whatever the underlying factors may be in producing the "acne complex," the immediate cause is due to a change in the activity of the sebaceous glands with occlusion of the gland ducts by keratotic plugs. Therapy should therefore be directed to removing these "black heads." To accomplish this keratolysis a combination of two factors is employed: (1) the use of hot compresses of saturated boric acid solution for thirty minutes before retiring; (2) followed by the overnight application of the following white lotion:

℞

Zinc Sulphate	dr. iv-dr. viii
Potassium Sulphurette	dr. iv-dr. viii
Aqua Rosae q. s.	oz. iv

m: Make separately. Mix together slowly with stirring. Allow to stand open overnight.
Sig: Apply with a paint brush before retiring.

Four drams of each of the two ingredients produces a thin mixture; six drams of each, a medium mixture; eight drams of each, almost a paste. One should begin with the lower concentration and increase to the strength that produces dryness and scaliness, the desired effect.

Greases and creams are contraindicated in acne as they tend to plug the gland ducts and retard the desquamation. In many cases it is advisable to remove the larger comedones on each visit.

The diet should restrict fried and greasy foods, fats and pastries, but quite as important as the quantitative amounts of fats and carbohydrates in the diet is the elimination of certain specific substances which cause exacerbations in acne vulgaris.

Bromides and iodides are well known causes of acneform eruptions. The appearance of acne for the first time in a patient past the acne age should be investigated for chronic ingestion of iodized salt, or the occasional use of bromides. During the past year an acne clinic has been created at Antioch College under the direction of Dr. P. B. Wingfield, college physician, and myself. It is our impression that iodized salt was an important etiological agent in the production and exacerbations of acne vulgaris in our cases, and its indiscriminate use in college eating halls should be condemned.

After the halogens, chocolate is the worst offender, and should be forbidden in any form, including cocoa.

Recently Karp, Nieman and Lerner[1] described a method of treating acne and its scars with a freezing mixture of solid carbon dioxide, acetone and sulphur. Our investigations along this line have just begun and permit hopes rather than conclusions.

DERMATOPHYTOSIS

One of the most important factors in the treatment of dermatophytosis is the proper and adequate employment of topical remedies. Here, as in all medicine, the intelligent use of a few well chosen remedies is wholly preferable to the haphazard use of many. Much can be achieved by the combining of two or more of these remedies and by variations in their respective percentages.

The first principle in the treatment of dermatophytosis is that the more inflamed and acute the skin condition, the milder the treatment employed. Where an acutely inflamed or denuded surface exists, wet dressings provide the most comfort and improvement. The feet should be immersed for three or four hours daily in Burrow's solution, diluted 10:1. The use of silver nitrate in one-fourth per cent dilution as a wet dressing seems to have become neglected. In many ways it is the ideal wet dressing.

After the acute symptoms have subsided, the production of desquamation of the interdigital skin and the removal of fungi plays an important part. For this purpose there is nothing to surpass the combination of salicylic acid and benzoic acid.

For the macerated, soggy type of dermatophytosis, alcoholic lotions are the most effective:

* Based on a paper read before the Wayne-Union County Medical Society, Richmond, Indiana, February 8, 1940.

[1] *Archives Dermatology and Syphilology*, June 1939.

℞
Salicylic Acid gr. xv
Benzoic Acid gr. xv
Alcohol (90%) q. s. oz. i
Sig: Apply with cotton on end of a match morning and night.

Whitfield's ointment finds its greatest usefulness in the dry, hyperkeratotic type of dermatophytosis, and it is best to start with half strength.

Whitfield's (Half Strength)

℞
Benzoic Acid gr. xxx
Salicylic Acid gr. xv
Wool Fat gr. xxv
White Petrolatum q. s. oz. i

The public and many physicians have the impression that dermatophytosis is incurable. The persistent application of these fungicidal remedies long after the last traces of the disease have disappeared will serve as good prophylaxis.

In tinea of the feet, the toe-nails are very often involved. Any nail that is thickened, discolored, and friable will probably show fungi on laboratory examination. Recurrences and allergic manifestations are said to be particularly common in those individuals showing nail involvement. I recall a case of hand eczema of fifteen years' duration which cleared up in six weeks after the patient was instructed to scrape the infected toe-nails with the edge of a glass slide every night following a hot potassium permanganate foot bath. A shattered electric light bulb provides an excellent supply of glass with the proper convex-concave scraping edge.

In those cases of mycotic infections of the feet, th "id," which is the allergic manifestation of the disease, and caused by absoption of the fungus or toxic products of the same, is almost always located on the hands. This is apt to run a chronic course characterized by remissions and exacerbations, and is usually more resistant to therapy than the original focus of infection.

The great majority of hand lesions are to be considered as fungus free dermatophytids and should, therefore, be treated with soothing remedies while the feet are undergoing more active simultaneous treatment. The following is an excellent plan of simultaneous treatment:

HANDS:

(1) ℞
Burrow's Solution.
Sig: Dilute 10:1 with warm water. Soak hands for one hour. T. I. D.

(2) ℞
Burrow's Solution 10 parts
Anhydrous Lanolin 20 parts
Lassars' Paste 30 parts
Sig: Apply to hands between soaking and overnight.

FEET:

(3) ℞
Tablets of Potassium Permanganate gr. v
Sig: One tablet to a basin of water. Soak feet for thirty minutes T. I. D. Keep solution as hot as possible.

(4) ℞
Salicylic Acid 3%
Benzoic Acid 6%
Unguentum Zinc Oxide q. s.
(or) Alcohol (90%) q. s.
Sig: Apply between toes overnight.

The purpose of this paper is to provide a cursory review of the management of acne and dermatophytosis for the man in general practice.

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MATERNAL AND NEONATAL MORTALITY IN INDIANA FOR THE YEAR 1939

This report is submitted by the Committee for the Study of Maternal and Fetal Mortality of the Indiana State Medical Association,* and was prepared with the cooperation of the Bureau of Maternal and Child Health and the Bureau of Vital Statistics of the Indiana State Board of Health. This article was prepared for the Committee by James H. Hawk, M.D., Indianapolis.

This is a continuation of the report published in the May, 1939, issue of *The Journal of the Indiana State Medical Association.*

As in last year's report, statistical information published here was obtained from questionnaires returned by doctors who cared for patients dying of puerperal causes.

The following information was obtained:

	1939	*1938*
Number of Maternal Deaths	211	222
Questionnaires Returned	145	143
Number of Live Births	58,350	54,692
Number of Twin Pregnancies	558	596
Number of Stillbirths	1,291	1,222
Number of Confinements	59,083	55,318

From the questionnaires returned we were able to gather the following figures:

White	134
Colored	11
Primipara	37
Multipara	55
Unspecified	53
Syphilis	
Negative serological test	25
Positive serological test	2
Died in Hospital	107
Autopsies	17

The actual causes of the maternal deaths reported were given as follows (some cases had more than one cause given, others were reported merely as sepsis, hemorrhage, etc.; therefore, the total of the sub-groups is not the same as the total for the main group in all cases):

* Members of the Committee: Chairman, H. F. Beckman, M.D., Indianapolis; J. C. Carter, M.D., Indianapolis; Foster Hudson, M.D., Indianapolis; and Carl P. Huber, M.D., Indianapolis.

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Sepsis	44	(52 in 1938)
After section	9	
After abortion	28	
After ruptured diverticulum	1	
After mastoidectomy	1	
Abortions	35	(37 in 1938)
Spontaneous	13	
Criminal	22	
Hemorrhage	35	(36 in 1938)
Placenta previa (2 followed section)	4	
Abortion	6	
Post-partum	19	
Abdominal pregnancy at term (operated)	1	
Ruptured uterus (one followed version, one followed labor in a patient formerly sectioned)	2	
Hydatiform mole	1	
Following section	2	
Eclampsia	18	(17 in 1938)
4 of these occurred post-partum		
Embolus	15	(16 in 1938)
Toxemia	13	(6 in 1938)
Ruptured Uterus	2	
Version	1	
Labor and former section	1	
Ectopic Pregnancy	7	(2 in 1938)
Shock	22	

A study of the relationship of cesarean section to maternal mortality in the cases reported revealed:

Cesarean Section	26	(21 in 1938)
After onset of eclampsia	5	
After cerebral hemorrhage	1	
After uterus ruptured	1	
Post-mortem	3	
Hemorrhage	4	
Sepsis	9	
Eclampsia	4	
Abdominal pregnancy at term	1	

Diseases or conditions complicating pregnancy and contributing to death were as follows:

Heart lesion	11	Influenza	1
Cardiac decompensation	7	Cerebral hemorrhage	1
Nephritis	7	Intestinal obstruction	1
Hyperthyroid	2	Subacute bacterial endocarditis	1
Coronary thrombosis	2	Congenital heart	1
Diabetes	1	Thrombophlebitis	1
Pyelitis	1	Lung abscess	1
Pheumonia	9	Uremia	1

Other factors which may have contributed to the maternal deaths were reported as follows: Ignorance, 19; carelessness, 12; poverty, 15; no prenatal care, 21; inadequate prenatal care, 19; 40 were said to have had adequate prenatal care; no doctor present, 2. These figures are grossly inaccurate because most of the returns had no indications of these conditions marked as such.

The maternal mortality rate for the year 1939 was 3.6 per 1,000 live births. If we are allowed to correct this maternal death rate by considering maternal deaths minus all abortions and total confinements, instead of live births, the figure drops to 2.8.

Only 13 patients were said to be toxemic whereas eclampsia accounted for 18 or 12 per cent of the total maternal deaths reported. Abortions account for 24 per cent of the mortality. Twenty-two of the 35 abortions, or 14% of the total deaths, were due to criminal abortions. Sepsis was given as the cause in 30 per cent of the total deaths reported, and 66% of these followed abortions, while 20% occurred after cesarean section. Hemorrhage was reported to have been excessive in 24% of the cases reported in detail. Of these, 17% followed abortion; 54% occurred postpartum, and 11% were due to placenta previa. Embolus was given as the cause of 10% of deaths. Syphilis was known to be present in 7% of cases having serologic tests.

SUMMARY AND CONCLUSIONS

1. Two hundred eleven mothers gave their lives in the course of 59,083 known confinements in the State of Indiana for the year 1939, producing 58,350 living infants of whom 1,460 perished in their first month of life.

2. Almost one-third of the maternal deaths were the result of sepsis. This figure can be improved by educating prospective mothers in regard to the dangers of abortion, by more judicious use of the operation cesarean section, and more careful observation of aseptic technic in the management of the parturient woman.

3. Hemorrhage was at least excessive in one-fourth of the cases reported. To reduce this figure it would be necessary for more women to be delivered under more favorable conditions; that is, in well-equipped delivery quarters where both packing and blood transfusions would be readily available. However, deep anesthesia and prolonged labor are definite factors in increasing hemorrhage. Again, abortions must be prevented and placenta previas must receive every consideration.

4. Eclampsia can be practically eliminated by good prenatal care, thus reducing maternal mortality by one-eighth.

5. Embolus, which resulted in ten per cent of the fatalities, is known to occur as the new mother becomes more active; consequently, a longer period of convalescence would be advisable.

NEONATAL DEATHS

As in last year's report, the problems to be considered were:

1. Why are so many babies born prematurely?

2. Why are so many babies lost in their first month of life?

3. What can be done to reduce this mortality?

The following information was obtained from questionnaires returned by physicians who signed death certificates for the babies that perished.

Fetal deaths grouped by race:	
White	846
Colored	29
Unknown	2
Study for lues among colored babies:	
No serologic test for syphilis	19
Negative serologic test for syphilis	9
Positive serologic test for syphilis	1
Colored deaths by month of gestation:	
5th month	1
6th month	4
7th month	10
8th month	4
9th month	5
Unknown	5
Study for lues among white babies:	
No serologic test for syphilis	407
Negative serologic test for syphilis	367
Positive serologic test for syphilis	3

	Live Births	Actual Number Deaths	Total Reported	Unknown Gestation	5 mos. or less	6 mos.	7 mos.	8 mos.	9 mos.	Still-births
January	4691	130	68	3	2	9	14	7	33	102
February	4270	124	74	4	5	13	15	7	30	96
March	4602	127	73	3	2	11	18	8	31	121
April	4198	114	68	1	3	23	13	8	20	90
May	4253	126	78	1	6	21	14	8	28	97
June	4173	105	75	3	2	13	15	9	33	87
July	4823	121	84	5	1	20	22	5	30	108
August	4775	105	83	4	4	17	21	12	25	106
September	4518	110	64	8	3	13	15	5	19	77
October	4570	113	75	3	4	17	19	8	24	101
November	4016	115	59	1	5	16	16	6	15	97
December	4262	114	76	4	2	19	14	11	32	83
Total	58350*	1460*	877	40	39	192	196	94	320	1291
Total (1938)	54692	1458	1031	89	37	198	240	120	347	1222

This table shows the actual number of fetal deaths in comparison to the number of replies to questionnaires and the number of still-births. It also shows the month of gestation a. which the reported pregnancies terminated.

** Discrepancy between totals and sum of the figures in the column is due to delayed returns. These figures are the latest available from the State Board of Health, Bureau of Vital Statistics.*

The 3 luetic white babies were born at the following month of gestation:
6th month 2
Unknown 1

As in the study conducted last year, the actual or contributing causes of fetal deaths were found to fall into three large classes: 1. Ante-partum. 2. Intra-partum. 3. Post-partum. Therefore the cases reported were studied for the purpose of placing the individual cause in one of these three main groups. In some cases there was no cause given and in others, two or more were given. A single death, therefore, may be included in each of the three groups.

ANTE-PARTUM CAUSES

A study of all fetal deaths revealed that 334 were attributed entirely or partly to ante-partum causes of premature birth. The following table shows the causes with the total number of deaths attributed to each, and likewise the number of premature, term, or pre-viable infants dying of each cause.

The following tables show a further division into extrinsic and intrinsic factors.

Extrinsic Causes

	Total	8-9 mos.	6-7 mos.	5 mos. or less	Unknown
Work	38	5	24	5	4
Fall	27	6	18	3	
Travel	11	1	10		
Overactivity	8	1	5	2	
Intercourse	3		2		1
Fight	2	1	1		
Auto wreck	2		2		
Punch in abdomen	3	1	2		
Mental strain and intercourse	2	1	1		
Moving	3	1	2		
Liquor	1				1
Quinine	1		1		
Induced	2		2		
Total	103	17	70	10	6

Intrinsic Causes

	Total	8-9 mos.	6-7 mos.	5 mos. or less	Unknown
Toxemia	41	18	20	1	2
Placenta previa	25	6	16	3	
Prematurely ruptured membrane	19	1	18		
Influenza	19	11	8		
Eclampsia	14	8	6		
Polyhydramnios	10	2	8		
Placenta abruptio	10	3	7		
Pneumonia	8	1	6	1	
Pyelitis	8	1	6	1	
Habitual premature	7	1	5		1
Diabetes	6		5		1
Endometritis	5		4	1	
Cardiac Disease	3	1	2		
Debility	3	1	1	1	
Placenta abruptio and fall	3	1	1	1	
Tuberculosis	3	1	1		1
Asthma	3	1	1		1
Hyperemesis	2		2		
Mumps	2		2		
Gastro-enteritis	2	1			1
Hypothyroid	2				2
Hyperthyroid	2	1	1		
Respiratory infection	2	1	1		
Toxemia with nephritis	2		2		
Epilepsy	1		1		
Cholecystitis	1		1		
Eclampsia with nephritis	1	1			
Bone tumor	1	1			
Placenta marginalis	1		1		
Contraction ring	1		1		
Cardiac decompensation	1	1			
Toxemia with Diabetes	1		1		
Placenta previa with paralysis agitans	1		1		
Bacterial Endocarditis	1		1		
Jaundice	1	1			
Asthma and insanity	1				1
Tularemia	1		1		
Amputated cervix	1			1	
Abortion	1		1		
Habitual abortion and endocrine dyscrasia	1		1		
Prolapsed uterus	1		1		
Endocrine Imbalance	1		1		
Intrauterine asphyxia	1	1			
Nephritis	1		1		
Former x-ray therapy	1		1		
Mentally defective	1	1			
Prolapsed bladder	1		1		
Peritonitis	1		1		
Mascerated twin	1	1			
Appendicitis	1		1		
Appendicitis operated	4	4			
Total extrinsic causes	103	17	70	10	6
Total intrinsic causes	231	71	140	10	10
Total of all causes	334	88	210	20	16

INTRA-PARTUM CAUSES OF DEATH

Intra-partum causes were entirely or partly responsible for 134 of the deaths reported.

	Total	Unknown	Month of Gestation 8-9	6-7	5 or less
Asphyxia	18		18		
Birth trauma and cerebral hemorrhage	98	4	90	5	
Prolapsed cord	7		6	1	
Cord around neck	8		8		
Hemorrhage from ruptured placental vessels	2		2		
Total	134	4	124	6	

This table lists the causes as given, shows the total deaths attributed to each, and the point in the gestation at which each infant was born. The

intra-partum group was further studied for its relation to other factors as follows:

	Breech	Face	Transverse Lie	Occ. Post.
Presentation*	19	2	4	5
	Difficult	Precipitate	Induced	
Labor*	14	1	1	
	High Forceps	Version	Forceps	
Delivery*	5	6	26	
Autopsy	16			

* Figures given represent only those reported as such on the returns.

POST-PARTUM CAUSES OF DEATH

Post-partum causes were entirely or partly responsible for 188 of the deaths reported. The table lists causes and the point in gestation at which each infant was born.

	Total	8-9 mos.	6-7 mos.	5 mos. or less	Unknown
Atelectasis	36	24	7	1	4
Multiple Deformities	24	17	5		2
Congenital heart	14	12	1		1
Hemorrhagic Disease of Newborn	12	11			1
Spina-bifida	11	9		1	1
Aspiration asphyxia	8	8			
Anencephalus	6	4	2		
Inanition	4	3			1
Hydrocephalus	4	3	1		
Jaundice	3	2	1		
Diarrhoea	2	2			
Peritonitis	2		2		
Pneumonia	2	2			
Sepsis	2	2			
Imperforate anus	2	2			
Esophageal-tracheal fistula	2	2			
Diaphragmatic hernia	2	1			1
Atresia bile duct	2	2			
Congenital defect unspecified	1		1		
Enlarged thymus	1	1			
Atresia Esophagus	1	1			
Spina-bifida and hydrocephalus	1	1			
Club feet	1	1			
Insufficient care	1	1			
Debility	1	1			
Malnutrition	1	1			
Pyloric stenosis	1	1			
Pemphigus	1	1			
Icterus Neonatorum	4	4			
Cleft palate and harelip	3	2			1
Congenital cardiac hypertrophy	3	3			
Hemorrhage from cord	3	3			
Erythroleucoblastosis	2	2			
Congenital brain malformation	2	2			
Spina-bifida and club feet	2	1			1
Meningocele	2	1			1
Hydrocephalus and double joints	1	1			
Non-patent bile ducts and congenital heart	1	1			
Dextra-cardia	1	1			
Undeveloped colon	1		1		
Acute nasopharyngitis	1	1			
Congenital atresia ilium	1	1			
Hemorrhage from circumcision	1	1			
Meningitis	1	1			
Intestinal obstruction	1	1			
Ritter's disease	1	1			
Acute nasopharyngitis	1	1			
Congenital polycystic kidney	1	1			
Hemorrhagic pneumonia	1	1			
Congenital atresia of ilium and micro-colon	1	1			
Deficient skull formation	1				1
Hermaphrodite	1	1			
Fibrosis of liver	1	1			
Cellulitis of abdominal wall	1	1			
Thrush	1	1			
Total	188	150	21	2	15

All cases reported were studied in regard to hospitalization, carelessness, poverty, ignorance, care, presentation, multiple pregnancies and possible improper diagnosis. The following figures represent these factors as reported.

The following table shows the age at which death occurred in babies dying of all causes:

Hospitalization:	
Died in Hospital	511
Died at home	359
Not reported	7
Carelessness, Ignorance and Poverty:	
Ignorance	28
Poverty	22
Carelessness	14
Ignorance and Poverty	7
Ignorance and Carelessness	10
Ignorance, Carelessness and Poverty	1
Care:	
No Prenatal Care	88
Adequate Prenatal Care	47
Inadequate Prenatal care	16
Inadequate post-partum care	2
No doctor in attendance	2
Presentation:	
Breech	64
Face	4
Transverse lie	6
Occipital-Posterior	4
Brow	1
Multiple Pregnancies	65
Improper Diagnosis:	
Patent foramen ovale	17
Blue baby	1
Congenital heart	27
Pulmonic stenosis	1

37 of the 64 breech births, were premature.

INTERPRETATIONS

Study of the first table indicates the fetal deaths were well distributed as to point in gestation at time of birth; however, in studying the last table it is seen that the majority of the deaths attributed to ante-partum causes occurred within the first day of life in babies of 6 to 7 months' gestation, whereas, those dying of intra-partum causes were still lost in the first two days of life, but were of 8 to 9 months' gestation. The post-partum group shows a more even distribution as to age, but here again the great majority were 8 to 9 months' babies.

Study of the ante-partum table reveals 334 or 50.9% of all causes given to come under this heading. Of this group 30.8% were extrinsic in nature, while 69.2% were intrinsic. Of the 334 causes, a total of 62.8% were given for babies of 6 to 7 months' gestation and 60.6% of the total intrinsic causes were in this same group as to gestation. We can further say that of the 103 deaths from extrinsic ante-partum causes, 64, or 62.1%, were the result of work, over-activity, intercourse, travel or other unnecessary causes. Of the 103 deaths, 67.9% were at 6 to 7 months' gestation. Study of

	Ante-partum				*Intra-partum*			*Post-partum*				
Days	*8-9 mos.*	*6-7 mos.*	*5 or less*	*Unk.*	*8-9 mos.*	*6-7 mos.*	*5 or less*	*Unk.*	*8-9 mos.*	*6-7 mos.*	*5 or less*	*Unk.*
1	47	164	20	6	82	5		1	52	10	2	6
2	9	11		2	21				15			3
3	9	9		2	10	1		1	18	1		3
4	6				3				11	2		
5	1	5			2				6	1		
6		6			2			1	6	1		
7				1	1					2		
8-14	3	5	2		2			1	25	2		2
15-30	2	6		5	1				18	1		1
Unknown		4			1				1	1		
Total	77	210	22	16	125	6	—	4	152	21	2	15

Due to overlapping of causes, the figure representing the grand total of the above table is larger than the total number of actual cases represented in the table.

intrinsic ante-partum causes reveals 69.6% of mortality in this group attributable to the first 10 causes listed, and of these, 62.1% were in the 6 to 7 months group. It must be considered that 60 or 25.9% were attributed to toxemia of various degrees.

Study of the intra-partum table shows 134, or 20.4% of total causes given to belong to this group. Of these, 80.6% occurred in babies of 8 to 9 months' gestation, and were given as birth trauma and asphyxia.

Study of the post-partum tables reveals that 188, or 28.5%, of the total causes given, fall into this group. One hundred, or 53%, of these were classed as congenital conditions. Atelectasis was given for 36 or 29.1% of deaths.

Let us now attempt to answer the questions faced by the committee:

1. Why were so many babies born prematurely? One has only to consult the table for ante-partum causes to answer this question. There were 383 infants among those fully reported known to be of seven months' gestation or less. This is 57% of the total for all causes fully reported. We see, in the ante-partum table, that there were 163 babies lost as the result of extrinsic causes (basically overactivity) and toxemia in some form.

2. Why are so many babies lost in their first month of life? First, death occurs as the result of prematurity as just described. Second, as a result of birth trauma and asphyxia (intrauterine). Third, 11% of all cases reported had demonstrable congenital defects.

3. What can be done to reduce this mortality? First, premature births can be greatly reduced by limiting the mothers' activity, chiefly work, travel, automobile riding, moving, and intercourse. Second, toxemic conditions can be almost eliminated by a well-balanced diet, containing adequate protein and vitamins and not too many calories, limitation of salt and fluids late in pregnancy, or, in general, limitation of weight-gain to twenty pounds. Third, more careful diagnosis during the last month of pregnancy with special emphasis on size of the pelvis and position of the baby will aid in reducing mortality due to birth trauma and asphyxia. Fourth, better care of the premature baby during its first month of life will materially reduce the mortality rate for this group.

SUMMARY

1. There were 58,350 live births, 1,460 neonatal deaths and 1,291 still-births in the State of Indiana in 1939, creating a fetal death rate of 39.2 per 1,000 live births.

2. 877 of 1,460 fetal deaths were reported on questionnaires sent to physicians. Of these, 656 were given one or more causes for death.

3. The causes of death were divided into: (1) Ante-partum; (2) Intra-partum; (3) Post-partum.

4. The majority of fetal deaths in babies less than three days old were found to be the result of ante-partum causes in premature births, and of intra-partum causes in full-term births.

5. Premature births were largely due to extrinsic ante-partum causes.

6. Birth trauma and asphyxia accounted for the majority of intra-partum causes.

7. Most of those dying of post-partum causes were full-term babies. In this group more than 50% of the deaths resulted from congenital conditions.

8. It is shown that adequate prenatal, intra-partum and post-partum care will reduce the neonatal mortality.

The Committee expresses its appreciation for the cooperation received from members of the Indiana State Medical Association, and herewith informs them that the questionnaires were destroyed after the material was tabulated statistically.

H. F. BECKMAN, M.D., *Chairman.*

ABSTRACT: INJECTION OF SULFAPYRIDINE SOLUTION UNDER SKIN HAS MANY ADVANTAGES

Injections under the skin of sodium sulfapyridine dissolved in a sodium chloride solution should be used when nausea or vomiting renders difficult the administration of the drug by mouth, when it is poorly absorbed into the blood stream from the stomach and intestinal tract, or when a high sustained concentration of the drug in the blood is imperative, George V. Taplin, M.D., Ralph F. Jacox, M.D., and Joe W. Howland, M.D., Rochester, N. Y., advise in *The Journal of the American Medical Association* for May 4.

The authors successfully injected the sodium sulfapyridine solution into the thighs or under the breasts of more than fifty patients with pneumonia and numerous other conditions in which administration of sulfapyridine by mouth was difficult or impossible.

The advantages of injections under the skin over administration of the drug by mouth, the three doctors say, are that there is no question about absorption, especially when vomiting is present; a high concentration in the blood can be reached within a few hours and maintained for eighteen to thirty-six hours; the requirement of sodium chloride is supplied at the same time, whereas many patients dislike taking salt by mouth; the fluid intake is supplemented, thus overcoming the difficulty of maintaining the fluid intake at necessary levels because of nausea and vomiting encountered in many cases in which sulfapyridine is given orally. They say also that smaller doses are generally required.

The advantages of injections under the skin over those into the vein involve the lack of danger of local reactions, effective concentration in the blood being maintained for a longer time—twenty-four hours as compared with about twelve hours, and a simpler and widely applicable technic of administration.

Regarding poisonous reactions, the authors report they have noted no appreciable difference in their incidence. "There were not sufficient cases in which the sodium sulfapyridine was used alone to evaluate its efficacy as compared with serum or sulfapyridine by mouth," they say, "but the general impression was that the sodium sulfapyridine given hypodermically was equal in effectiveness to oral sulfapyridine, and as a rule smaller amounts were required to cure the patient."

INDICATIONS FOR THE INJECTION TREATMENT OF HEMORRHOIDS

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The treatment of hemorrhoids consists of the excision or obliteration of the varicose veins that form the chief portion of the hemorrhoidal mass. The method usually used is surgical removal of the veins and associated tissues under either local or general anesthesia. This method can be used on hemorrhoids of all types and is also suitable when they are associated with other anorectal conditions requiring surgery for their cure. Hospitalization is required for from four to five days and, if the operation is properly performed and attention given to the postoperative care, the patient has very little postoperative pain. Convalescence lasts about three weeks during which time the patient is able to be up and about and is usually able to do light work.

The injection method of treatment is suitable only for the treatment of internal hemorrhoids and the internal portion of externo-internal hemorrhoids. It consists of the injection of some sclerosing solution into or around the internal hemorrhoidal mass so that the resulting fibrous tissue will obliterate the veins and reduce the size of the tumor mass. In the cases suitable for this form of treatment there is no need of hospitalization or anesthesia. The patient has very little discomfort throughout the entire course of treatment, which usually lasts from three to six weeks. Simply because this method does not require hospitalization it has been used by many irregular practitioners and consequently has been exploited as a "cure" for all types of hemorrhoids. Such claims are obviously false. If one wishes to treat hemorrhoids it is well to be familiar with both methods in order that the proper one may be applied to the individual case.

THE TECHNIQUE OF THE INJECTION METHOD

The instruments necessary for the injection of hemorrhoids are (1) an anoscope of the tubular type with a removable obturator, (2) a glass syringe of one or two cc. capacity, (3) a 23 gage needle two or two and one-half inches long, (4) a headlamp for illumination, and (5) the sclerosing solution.

The patient has been previously examined with a proctoscope and needs no further preparation than to have emptied the rectum by defecation. He is placed on an ordinary examining table in the left lateral or knee chest position. The well lubricated anoscope is passed the full length into the anus and the obturator withdrawn. Under the illumination of the headlamp, the anorectal region and the lower rectum is inspected and the hemorrhoidal masses are caused to project into the lumen of the distal end of the anoscope. The mass selected for injection is touched with an alcohol swab. The needle, which is attached to the previously filled syringe, is inserted into the center of the mass. Aspiration with the syringe will make certain that the needle is not in the lumen of a vein. From two to eight minims of the solution are injected into the mass, the needle is kept in place for one minute, and then the needle and anoscope are withdrawn together. The slight delay and the simultaneous withdrawal will prevent any leakage of solution from the needle puncture.

The solutions used are aqueous solutions of either 5 percent quinine and urea hydrochloride, 10 to 20 percent phenol with glycerine, or one of the sclerosing solutions used in the treatment of varicose veins. A report on the results obtained with various types of solutions will appear later, when the present work is completed. The chosen solution must be injected beneath the rectal mucosa, but superficial to the muscularis. The amount of solution injected depends upon the one used but should never be enough to cause necrosis and ulceration with a possible severe secondary hemorrhage. Usually one hemorrhoid is injected at a time; the interval between treatments is from four to seven days.

In the rectal division of the Surgery Dispensary of the Research and Educational Hospital we have formulated what we consider indications for the operative and the injection treatment of hemorrhoids. With many more patients applying for treatment than can be admitted to the hospital, we probably err on the side of using the injection method in the borderline cases where we would consider operation the better method in a similar patient in private practice. The factors that we have considered in determining the type of treatment to be used in the dispensary include the type of hemorrhoids present, the presence of associated anorectal conditions or infections that would require surgery, and the probability of cure when injections alone are used.

CLASSIFICATION OF CASES

Hemorrhoids may be classified with respect to the type of epithelium covering them into three groups: the external hemorrhoids covered with rectal mucosa, and mixed or externo-internal hemorrhoids in which the mass is extensive enough to be covered with skin at its lower portion and rectal mucosa at its upper portion.

The external type includes the varicosities of the anal canal only visible on straining and which are usually symptomless, and the skin tags that remain after resolution of acute thrombosis of the external hemorrhoidal veins. If there are no symptoms, no treatment is necessary. When a thrombosis occurs in some of the external varicosities the area of the thrombosis is injected with some local anesthetic solution; an elliptical portion of skin with the clot is then removed. The wound is not sutured.

Internal hemorrhoids, covered with rectal mucosa, can be treated by injection because the absence of sensory nerves above the anorectal region allows the use of quite irritating solutions without the patient feeling pain. The part of the externo-internal hemorrhoids covered by rectal mucosa can be injected for the same reason. In these mixed types the resulting obliteration will usually decrease the size of the external portion, which is never injected. In the presence of acute infection or ulceration, injections are never used, and this especially includes the cases of acute thrombophlebitis of the hemorrhoidal plexus commonly referred to as "strangulated piles." The damaged and infected tissues can not tolerate irritating solutions and the result will be abscess formation or even general sepsis.

Hemorrhoids can also be grouped into three groups with respect to the symptoms present.[1, 2] Group I includes patients with no symptoms or with only painless bleeding at stool. These patients have no noticeable prolapse. Group II includes those patients with a history of painless bleeding at stool associated with some degree of protrusion. The prolapsing or protruding hemorrhoids retract within the rectum spontaneously after defecation. Group III includes those patients with a history of painless bleeding and an associated persistent prolapse, or a prolapse that occurs spontaneously when the patient is on his feet or with only slight straining. In these cases it is necessary to reduce the prolapse with the fingers.

Records of the last 100 consecutive hemorrhoid cases admitted to the dispensary have been reviewed. They have been classified with respect to their covering into external, internal and externo-internal hemorrhoids and also into the three groups with respect to the symptoms present. The results are shown in Table I. It will be seen that there were only four cases of external hemorrhoids. The internal hemorrhoids or group I comprise 39 percent of the total, while internal hemorrhoids in group II and III were only four and eight percent, showing that internal hemorrhoids present chiefly with the history of painless bleeding without prolapse. The externo-internal hemorrhoids, however, had only three percent in group I and 21 percent in both groups II and III, showing that by the time prolapse of moderate or severe degree is present the masses have become large enough to be covered by both skin and rectal mucosa.

Experience has shown that injections of internal hemorrhoids or of the internal portion of externo-internal hemorrhoids will produce cures in about 90 percent of cases in Group I, about 40 to 60 percent in Group II and in about 10 percent in Group III. For this reason it is advisable to recommend injection in Group I and to advise operation in Group III. Injection may be tried in Group II, but the patients should be told that they have only a 50 percent chance of cure by such treatment and that operation may ultimately be necessary.

ASSOCIATED SURGICAL LESIONS

In the series of cases studied, all the associated anorectal conditions were noted, as were some other

Table 1

Type of Hemorrhoids	*Number of Cases*	*Complications Present*	
EXTERNAL—covered with anal or perianal skin	4 (4%)	Acute thrombotic hemorrhoid	1
		Pruritus ani	1
		Rectal polyp	1
		Decompensated heart disease	1
INTERNAL—covered with rectal mucosa			
Group I. Painless bleeding without prolapse	39 (39%)	Anal fissure	12
		Fistula	1
		Pilonidal sinus	1
		Anal prolapse	3
		Cryptitis	2
		Hypertrophied papillus	1
		Secondary anemia	1
		Secondary Syphilis	1
Group II. Painless bleeding, protrusion at stool which is spontaneously reduced	4 (4%)	None	
Group III. Painless bleeding, with persistent prolapse or which must be replaced by patient	8 (8%)	Abscess	1
EXTERNO - INTERNAL — or mixed, covered with both skin and rectal mucosa			
Group I	3 (3%)	Anal fissure	2
Group II	21 (21%)	Anal fissure	2
		Pruritus ani	
		Acute thrombotic external hemorrhoid	1
		Hypertrophied papillus	1
		Cholelithiasis	1
		Coccygodynia	1
		Carcinoma of cervix	1
		Carcinoma of prostate	1
Group III	21 (21%)	Anal fissure	1
		Fistula	1
		Hypertrophied papillus	1
		Cholangitis	1
TOTAL	100 (100%)		

[1] Runyeon, F. G.: Cyclopedia of Medicine, Philadelphia, F. A. Davis and Co., 1934, v. 10, p. 1062.

[2] Milligan, E. T. C.: Personal communication.

more serious complications. These conditions are listed under the column of "Complications Present" in the table.

We feel that hemorrhoids associated with surgical lesions of the anorectal region should be treated by operation at the same time that the complicating condition is corrected. This applies especially to anal fissures and ulcers, small fistulas, cryptitis, hypertrophied anal papillae and rectal polyps. The total period of healing is no longer, and office surgery followed by injections, while possible, seems as irrational as the proverbial amputation of a dog's tail an inch at a time so that the dog will feel less pain than if it were removed all at one time. We, therefore, have advised surgery in Groups I and II where these complications were present.

INDICATIONS FOR INJECTION

Injections were advised and used in all internal and externo-internal hemorrhoids in Group I where there were no complicating anorectal conditions requiring surgery. Injections were suggested to patients in Group II if no complicating conditions were present, but they were told that they had only a 50 percent chance of cure by this method.

Table I shows that there were 42 cases of internal and mixed hemorrhoids in Group I and of these 22 had associated surgical lesions. One patient with a florid secondary syphilis was referred for treatment for syphilis and the hemorrhoids ignored for the time being. This left 19 patients for whom injection was advised.

In Group II there were 25 patients of whom five had associated anorectal conditions requiring surgery leaving twenty patients for whom injections were considered suitable.

INDICATIONS FOR SURGERY

Surgery is advised in all cases of external hemorrhoids. In the series this included three of the four cases. The fourth patient, with a decompensated heart disease, was considered medical and the hemorrhoids were ignored.

Surgery was advised in all patients in Group III. This included 29 in this series. A patient with a jaundice and cholangitis was considered medical and the hemorrhoids ignored.

Surgery was advised in all cases in Groups I and II with associated surgical anorectal conditions. In this series this included 26 patients. The total patients in which injections were advised were 39. Surgery was advised in 57. Theoretically the cases for injection should number 41 and for operation 59. Martin and Yeomans have reported that about 50 percent of all hemorrhoid cases are suitable for injection.[3, 4]

CONCLUSION

Injection treatment of hemorrhoids is to be preferred in patients having internal or externo-internal hemorrhoids without complicating surgical lesions, when they have had painless bleeding at stool without prolapse.

Injection treatment can be used in patients having internal or externo-internal hemorrhoids with a slight degree of prolapse, but they should be warned that they may not be cured and that operation is necessary in about half of all cases.

Injections are not to be advised for patients with a considerable degree of prolapse, those with external hemorrhoids, or when there is present an associated surgical condition.

In a series of 100 consecutive cases of hemorrhoids admitted to the dispensary, about 40 percent were considered suitable for injection and about 60 percent were referred for operation.

[3] Martin, C. F.: The injection treatment of internal hemorrhoids. *Amer. Med.* 8:365, 1904.

[4] Yeomans, F. C.: Proctology. D. Appleton and Co., New York, 1929, p. 155.

ABSTRACTS

MORTALITY RATE FROM PERITONITIS AFTER APPENDICITIS DECREASES

The mortality rate from peritonitis (inflammation of the membrane lining the abdominal walls) complicating appendictis was 17.22 per cent from 1934 to 1938 as compared with a rate of 33.9 per cent in operative cases alone during the period from 1915 to 1933, Mont R. Reid, M.D., and William P. Montanus, M.D., Cincinnati, report in a comparison of two series of cases, published in *The Journal of the American Medical Association* for April 6.

In their analysis of 1,153 cases of appendicitis treated at the Cincinnati General Hospital during the years 1934 to 1938 inclusive the authors found a total death rate of 4.86 as compared with 6.4 per cent during the period 1915 to 1933 inclusive. The rate of 17.22 per cent in peritonitis represents the most gratifying decrease. The very slight drop from 11.4 per cent to 10.08 in the group with abscess complicating appendicitis they consider discouraging. Greater conservatism in treating such patients, they say, might have resulted in a decreased mortality.

BB SHOTS FOUND IN APPENDIX

Thirty-eight BB shots and numerous flakes from them were found in the appendix of a man who ate from ten to twenty ducks and pheasants yearly, John R. Earl, M.D., St. Paul, reports in *The Journal of the American Medical Association* for May 11.

The patient consulted Dr. Earl because of severe back strain. X-ray pictures showed metallic shadows and these were separated and diagnosed as shot with the aid of the fluoroscope (an x-ray apparatus permitting visualization of structures within the body). Occasional discomfort over the appendix was complained of by the patient. He made an uneventful recovery after the appendix was removed. The case illustrates the diagnostic value of fluoroscopy as supplementary to x-ray pictures.

CORRECTION. Through a printer's error, the plate was reversed for figure Number 1, illustrating the case report by Drs. Millis, Collett, and Dodds, on page 248 of the May issue of THE JOURNAL.

Medicine Today

"Be not the first by whom the new are tried, nor yet the last to lay the old aside."

WEIR M. MILEY, M.D.
Anderson

Blumgart and associates, in a recent number of *The American Heart Journal*, report clinical and pathologic studies of one-hundred twenty-five consecutive autopsy cases. The purpose of the study was to show the relation between angina pectoris, myocardial infarction, and congestive failure, and conditions found at autopsy. In each case the coronary arteries were injected with a lead agar mass, x-ray plates made, and the injected arteries carefully traced by dissection, down to vessels forty micra in diameter. In the cases in which there was no evidence of coronary arteriosclerosis there was no anastomosis between the main coronary arteries or their branches. This was true regardless of age. Hearts from patients eighty years of age and over which showed arteriosclerosis showed no anastamoses. In the total series there were thirty hearts from patients who in life had a history of angina pectoris or congestive failure, or which at autopsy showed evidence of coronary arteriosclerosis. In this series the cases that showed coronary-arteriosclerosis also showed anastamoses between branches of the coronary arteries. They conclude that while anastamoses are not present in normal hearts, they do develop as a result of obstruction to coronary blood flow from arteriosclerotic narrowing and occlusions. The element of time was considered an important factor. For anastomotic branches to develop, the obstruction to blood flow must progress gradually and slowly.

In twelve of the thirty cases there had been a history during life of angina pectoris. In all of these twelve cases there was found at autopsy complete occlusions of two main coronary arteries and in two of the twelve cases there was occlusion of all three main coronary arteries. In several cases the entire blood supply to the ventricles was derived from one coronary artery. In thirteen cases, coronary occlusions were found at autopsy where there had been no history of angina pectoris during life. However, in this group, all but two cases showed occlusion of only one coronary artery. The contrast to the preceding series of twelve cases was that in the cases in which there had been a history of angina pectoris, the number of occlusions was greater and consequently greater obstruction to blood flow was produced. The extent to which an anastomotic circulation could develop to compensate for multiple occlusions and narrowing was stressed. There were five cases of hypertrophy caused by valvular or hypertensive heart disease in which during life there had been a history of angina pectoris, but which at autopsy showed little or no arteriosclerosis. In these cases anastomotic branches had also developed, but to a much less degree than in the arteriosclerotic cases. In these cases the anastomotic branches had not kept up with the hypertrophy and the anginal pain was considered to have been caused by relative insufficiency of the coronary blood supply.

A distinction should be made between the use of the terms coronary occlusion and myocardial infarction. Coronary occlusion may occur without infarction, and infarction may occur without coronary occlusion. The clinical picture of prolonged chest pain accompanied by a fall in blood pressure and shock, and followed by fever, leukocytosis and electrocardiographic changes, should be called myocardial infarction. Coronary occlusion may or may not have caused the infarction. One case was described in which the patient during life had developed a prolonged chest pain following exertion. He continued the exertion in spite of pain and the clinical picture of infarction developed and death resulted. At autopsy myocardial infarction was found but there were no recent occlusions in arteries to the infarcted area; however, marked arteriosclerosis and narrowing of arteries supplying the infarcted area were found. The infarction had been caused by prolonged ischemia from deficient coronary blood supply and not from coronary occlusion. In cases of this kind where prolonged chest pain occurs without other signs of infarction, if the patient is put to bed immediately and the heart rate slowed, the coronary blood supply might be adequate to prevent infarction. Sudden fall in blood pressure in cases of advanced arteriosclerosis with consequent slowing of coronary blood flow is the common cause of coronary thrombosis. For this reason, the importance of attempting to prevent any sudden fall in blood pressure as might occur in post operative shock or severe infection must be stressed.—*The American Heart Journal*, January, 1940.

The problems presented in the treatment of senile or arteriosclerotic diabetics are often different from those encountered in younger diabetics without arteriosclerosis. This subject is comprehensively discussed by Keeten in a recent number of *The Medical Clinics of North America*. One of the problems discussed by this writer is that of hypoglycemic reactions in this type of patient. Hypoglycemic reactions occurring in the senile diabetics who are being given regular insulin or protamine with regular insulin are often difficult to detect. Their prevention is important because of the danger of anginal attacks and coronary

thrombosis, either of which may occur when there is a rapid fall in blood sugar. Hypoglycemic reactions in this type of patient are often particularly difficult to detect because they may occur when the blood sugar is not low and even in the presence of glycosuria. This apparent paradoxical condition is explained on the basis of transient depressions in the blood sugar level produced by excessive doses of insulin. These transient depressions initiate the protective reaction of adrenalin secretion and mobilization of glucose in the blood from the liver, which protective reactions may be excessive and raise the blood sugar level sufficiently to produce glycosuria. Under these conditions a reduction in the insulin dosage prevents these protective reactions and stops the glycosuria. Keeten emphasizes that, even in the presence of glycosuria, insomnia, restlessness at night and attacks of mental confusion may be caused by too much insulin and he regards a sudden increase in the amount of urine, in the absence of acetone, as a symptom of insulin reaction.—*The Medical Clinics of North America*, January, 1940.

CASE REPORT: ENDOMETRIAL CYSTS OF THE OVARIES

B. W. RHAMY, M.D.
E. H. SCHLEGEL, M.D.
J. J. HAYES, M.D.
Fort Wayne

Mrs. G., aged 32 years, reporting for an examination, complains of a gradual increase in the size of her lower abdomen. Menstrual history is negative except the last two periods which were delayed and the flow was a trifle scanty. No abdominal pain was present.

The pelvic examination revealed two fixed tumors along the sides of the uterus. No tenderness. The cervix was moderately eroded.

Operative Procedure: The abdomen was opened through a midline incision. The small bowel was adherent along the entire old operative scar. She had had a salpingectomy and appendectomy ten years before. These adhesions were separated. A small amount of free fluid was present in the pelvis.

On each side of the uterus, which was slightly larger than normal and contained many small subserous and intramural fibroids, there were two rather thick-walled cysts, each six inches in diameter, firmly bound by adhesions to the uterus, the broad ligament, the small bowel, and the ligament colon. The adhesions were separated with difficulty, those adherent to the small bowel being particularly firm. A supravaginal hysterectomy was performed and the cysts were excised. The abdomen was closed with one soft rubber draining tube in place. The patient made an uneventful recovery.

Pathological Report: The largest ovarian cyst measures 14x12x9 cm. in size, and in its wall contains a well developed corpus luteum. When opened, the contents of the cyst are found to be watery chocolate-colored fluid. The lining is coarsely trabeculated, suggesting a previous multilocular architecture. The opposite cyst measures 11x9x6 cm. in size, is thin walled, and when sectioned is found to be composed of two cysts of equal size. One is a dermoid cyst while the other contains chocolate-colored material and is made up of numerous small intercommunicating cysts. The supracervical uterus measures 9x6x5 cm., is enlarged and shows a congested, hyperplastic endometrium averaging 5 mm. in thickness. The myo-



(A) Chocolate cyst of ovary with thin wall and dark brown lining membrane due to old blood pigment. (B) Opposite ovary showing trabeculation produced by numerous chocolate cysts rupturing into one another.



(A) Endometrial cyst in the anterior wall of the uterus. (B) Half of endometrial canal. (C) Chocolate cysts of the ovary.

metrium contains several leiomyomata which appear to contain endometrial tissue. However, this was disproven on microscopic examination, which showed only the parallel and interlacing bundles of smooth muscle and connective tissue.

Microscopic Examination: The cysts of both ovaries are lined by characteristic endometrial epithelium supported by typical endometrial stroma containing abundant old blood pigment. The endometrium of the uterus is hyperplastic and of the late premenstrual or late secretory phase.

Pathological Findings: (1) Endometrial cysts of both ovaries (cholocate or Sampson cysts), (2) Late premenstrual endometrial hyperplasia, and (3) Multiple small leiomyomata of the uterus.

Comment: With endometrial implants within the uterine wall, the ovary, peritoneum or abdominal muscle, the most frequent and often the only symptom is periodic monthly abdominal cramps or marked dysmenorrhea.

This lesion is among the most frequently encountered pelvic lesions in patients under the menopausal age. The most frequently encountered sign is a progressively enlarging pelvic tumor mass often immovable on bimanual examination. When the implant is within the rectus muscle, the enlargement may be periodic, coincident with the menstrual period. At the time of operation it has the appearance of a bloody sinus tract.

The operative appearance of the cysts in the pelvis is characteristic. Adhesions are plentiful and of a tough, dense character. Ovarian cysts, if present, are bound to all adjacent structures—as noted in the above case. If implants have occurred on the peritoneum of the bowel, various loops may be bound together so that separation is impossible. Close inspection will reveal one or more small or large dark-blue-red cysts. These always contain chocolate like material and, with the above, are practically diagnostic. If doubt remains, a biopsy of a complete small cyst is usually sufficient for diagnosis. Fear of spilling the contents into the abdomen should be overcome. This has been occurring each month for months before operation, and with proper therapy, any additional implants are of little importance.

When the endometrial tissue is found in the uterine wall, it is usually the result of an extension of this tissue from the endometrial cavity. It practically always causes enlargement of the uterus to two or three times the normal size. Occasionally this tissue will form a chocolate filled cyst or sinus tract in the muscle. More frequently it stimulates the formation of a leiomyoma about it as was suspected, but not found, in the above case.

The course of events in the occurrence of endometrial cysts is still the subject of debate. Nevertheless, the theory most widely accepted is as follows: During a menstrual period, fragments of epithelium break off and due to the tonic contractions of the uterus are forced out through the tubes to be implanted on some peritoneal surface, most frequently the ovary. Here a small cyst is formed and with each subsequent menstrual period its lining epithelium undergoes hypertrophy followed by desquamation and hemorrhage in the same manner as the lining epithelium of the uterus. The cyst gradually enlarges; it may rupture, producing adjacent implants, or it may produce implants all over the abdomen so that it may be mistaken for abdominal carcinomatosis. Most often it produces adjacent ovarian implants which gradually fuse together forming a large chocolate cyst with firm adhesions to all surrounding structures.

This entire pathological process is dependent on the endocrine functions of the ovary for its maintenance and expansion. Complete removal of this endocrine function, either by irradiation or by surgery, results in the disappearance of the lesions and the relief of symptoms.

ABSTRACTS

ANEMIA REQUIRES FREQUENT TREATMENTS

The majority of patients with pernicious anemia cannot be satisfactorily treated by injections of liver extract at long intervals even if massive amounts are given, Maurice B. Strauss, M.D., and Frederick J. Pohle, M.D., Boston, assert in *The Journal of the American Medical Association* for April 6.

From their study of fifteen patients who required relatively little liver extract, they conclude that relapse is possible in as short a time as two months after liver treatment is omitted. Twelve of the patients had relapses within a period of ten months after its discontinuance.

"The optimum interval between injections for most patients with pernicious anemia is from one to four weeks," they declare.

SIMPLE METHOD RESTORES PROTHROMBIN IN ABSENCE OF SEVERE LIVER DAMAGE

A simple method of restoring prothrombin, the antihemorrhagic factor in blood, when there is no severe liver damage present, is reported by William DeW. Andrus, M.D., and Jere W. Lord Jr., M.D., New York, in *The Journal of the American Medical Association* for April 6.

Liver damage has been found to interfere with the production of prothrombin. In the absence of damage to the liver the New York men gave patients with low prothrombin blood levels a synthetic compound, 2-methyl-1, 4-naphthoquinone, which has a marked vitamin K activity. This vitamin is antihemorrhagic.

In twenty-six of the twenty-eight patients to whom the authors gave the compound the prothrombin level rose as much as 48 per cent within from twenty-four to forty-eight hours after the substance, dissolved in corn oil, was injected by vein.

Some of the types of cases in which the substance was found effective were: obstructive jaundice due to stone, hemorrhagic disease of the newborn and cancer of the stomach and pancreas.

The two patients who were not benefited by injections of the compound had liver damage.

Drs. Andrus and Lord point out: "The effect of a single injection may be prolonged for as long as a week, unless adverse factors such as operations on the biliary tract or other liver damage supervene."

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JUNE, 1940

Editorials

RETIREMENT OF DOCTOR BURTON D. MYERS

Word comes that Doctor Myers has reached retirement age at Indiana University. It will seem strange to think of anyone else at the helm in the medical school at Bloomington. He came to Indiana as professor of anatomy in 1903. At that time the university was making its first attempt in the direction of building up a medical department which was later to become the great medical school that it now is. Those were times when anatomical material was to be had only by digging for it, but as the university was loathe to go into the grave-robbing business, the anatomy classes were compelled to do their dissections upon dogs and other mammals. It was not long, however, until the anatomical law was passed—and for this we have Doctor Myers to thank in large part—and human material could be had. Then in 1908 a combination of the various medical schools was effected and the clinical facilities of Indianapolis were made available. This date may be considered as the real beginning of the present school. Again it was Doctor Myers who was largely responsible for the advance.

During the thirty-seven years of his connection with the medical school, it is safe to say that he has instructed something near 2,500 medical students who have since become physicians. Nearly all of these men were selected by him as he acted in the capacity of dean, and all of them came under his influence in classes in anatomy, histology, and neurology. To these men, "B. D." is a vivid character indeed. It is hard to conceive of the medical school without him. He was invariably greatly interested in the boys and immensely proud of the records which they have made. Beyond doubt, he has been the foremost medical educator in the history of the State of Indiana. For more than a quarter of a century, he was the abiding genius of old Owen Hall, but since 1937 he has held forth in the beautiful new medical building located at Forest Place and Third Street. This building is a tangible result of his love and devotion and may honestly be regarded as a memorial to him. It was his energy and vision which held on until funds were found for its erection. There has been much talk among alumni to the effect that this building should eventually come to be called Burton Dorr Myers Hall.

Honors of many kinds have come to Doctor Myers. He was at one time (1928-29) the president of the American Association of Medical Colleges. He was granted a star in the first edition of *American Men of Science* and he has held that distinction ever since. This indicates that he was chosen by his colleagues as being one of the one thousand most prominent scientific men in America. In 1933 he was made vice-chairman of the Indiana State Planning Board; in 1923 he was elected district governor of the Indiana Kiwanis district. He is a member of the honorary fraternities Sigma Xi, Phi Beta Kappa, and Alpha Omega Alpha. He holds degrees from Buchtel College (Ph.B.); Cornell University (A.M., 1900), and University of Leipzig (M.D., 1902). In 1904 he married Maude A. Showers of Bloomington. There have been four children, James Showers (deceased), Mary Isabel, Rudolph Burton, and Margaret Ann. Of these children, Rudolph is a recent graduate of Indiana University School of Medicine.

The good wishes of his thousands of friends and former students will go with Doctor Myers as he enters this new phase of his medical career—professor emeritus of anatomy at Indiana University School of Medicine. His has been and will continue to be a most useful life to the University, to the State, and to the Nation.

PHYSICIANS AND THE NARCOTIC LAW

The Harrison Narcotic Law has been in effect for many years and during that time several physicians have undertaken to evade it, usually for the financial gain to be secured through the sale and misuse of these drugs. During a rather extensive service as a member of the Indiana State Board of Medical Registration and Examination, we had occasion to observe many of these violations since it was the rule of the Board that all offenders who were caught up in the meshes of the law for these violations were brought before the Board to defend their right to continue in the practice of medicine.

In that period of service many cases were heard which were mere technical violations of the law

while others were overt efforts to disregard all regulations in the handling of various narcotics. One case is remembered where a physician prescribed something like five hundred quarter-grain tablets of morphine and repeated the prescription within a fortnight. Yet after serving a term at Fort Leavenworth, when he was brought before the Board he maintained that he was but properly taking care of a regular patient, in spite of the evidence which clearly set forth that the recipient of the drugs was not a bona fide patient but was known to be a peddler of narcotics.

Many cases were heard in which the violation was clearly set forth, even the statements of the physicians before the Board making frank admissions as to their shortcomings, each offering some new and novel excuse. However, the law is clear and its provisions are so generally understood by members of the medical profession that it seems, after all these years and with the knowledge that doctors continue to be sent to federal prison for violations, that attempts to "get away with it" would cease. However, federal investigators tell us that they have about the same number of cases now as in former years and that the same old methods are used in evading the law.

Recently a young Indiana physician, a man who had obtained his medical education only by dint of extreme hardship and perseverance, a young man whose start in his medical career seemed unusually propitious, stood before a Federal judge and heard the pronouncement that he was to spend two and one-half years in Fort Leavenworth—a mighty price to pay at any age, but especially so at the very start of his professional career. All this to gain a few extra dollars!

The provisions of the law are so clearly set forth that there is little or no excuse for any physician to become involved unless he deliberately sets out to violate the restrictions regarding the sale and use of narcotic drugs. We may have reservations regarding some of these regulations, but they are in effect, nevertheless, and it becomes our duty to respect them. It should be borne in mind that at about the time the Harrison Act became effective, the medical profession was generally regarded as being chiefly responsible for the creation of narcotic addicts; this was untrue, but the general public had come to believe the medical profession was guilty. Since then it has become universally known that our profession is not the offender it was supposed to be and that narcotic peddlers, even the various "narcotic rings" throughout the entire world, are the greatest offenders in this regard. However, it behooves the medical profession to keep its doorstep clean in these matters and flagrant violations are harmful to the whole profession. Somehow or other some of our professional brethren forget that the ill-timed acts of a few reflect upon the entire group.

EVERY PHYSICIAN MUST RENEW HIS NARCOTIC PERMIT ANNUALLY ON OR BEFORE JULY FIRST.

THE PROBLEM OF MYOPIA

In the May number of THE JOURNAL, in connection with a series of special articles having to do with conservation of vision, the subject of myopia was somewhat sketchily presented. Because of limited space, an extensive discussion of this important subject was impossible, though it is of sufficient importance to command very serious consideration. Myopia, commonly called "near-sightedness," is a much misunderstood affliction and very commonly is mishandled, and by that we mean that the treatment of this condition demands more than the cursory attention it often receives.

As was pointed out in Dr. Ravdin's discussion of the subject,[1] heredity must be given the greatest consideration when one enters into the etiology of the disease, for many writers declare that myopia *is* a disease. Another factor of much importance is that myopia in young children rarely improves; on the other hand, the tendency is for it to increase. As to heredity, we have numerous records in our files of third and fourth generations who are myopic. It is true that all children of myopic parents do not acquire this condition. It is our experience that myopia seldom increases after one has reached the age of thirty to thirty-five years.

Myopia is of such importance as to demand the attention of the most skilfull refractionists and, while it is true that the myopic eye possesses little or no accommodation, mydriatics are in order for all examinations. The problem of how much of the total degree of myopia should be corrected is of great importance; our rule is to give a complete correction in children, though this rule cannot be followed in all adult cases.

The things we are most interested in at the moment, in connection with myopia, have to do with the management of these cases. It is our opinion that a "myope," regardless of age, provided he requires one diopter or more of correction, should wear his glasses at all times. This is particularly important in growing children. Too commonly do we have these cases present themselves with the story that they have been advised to use their glasses only part of the time, especially for close work. Since the myopic eye is better adapted for close work than for distance vision, such advice is not easily understood. It should be a rule of the oculist to explain the condition, when he has completed the refraction of the myopic child, to urge the importance of using the glasses for both distant and near vision, and to stress the importance of having the eyes rechecked within a year; some cases require re-examination within six months.

We decry the advice of some refractionists, including physicians, that "after a year or so this condition will clear up and you will no longer need glasses." This is untrue; myopia is not cured by

[1] Ravdin, B. D.: Practical Points in Refraction for the General Practitioner. *J. Ind. St. Med. Assoc.* 33, 5, 237 (May) 1940.

glasses or by any other means. The system recommended some years ago of using various exercises together with strong lights of various sorts long ago became outmoded, yet many refractionists continue to advise such measure, resulting only in a profit to themselves.

Myopia is an affliction; we prefer to call it a disease. It does not improve, it demands constant correction, and it also demands more attention than it now receives at the hands of many refractionists.

MORE ABOUT THE MARRIAGE LICENSE LAW

We had thought this topic well out of the way, for a time at least, following our discussion in the May number of THE JOURNAL, but it seems to be a direct-line descendant of Banquo's ghost.

The purpose of the law is so generally understood as to require no comment, and the reasons for its enactment are equally clear. It might be well to recall, however, that at the first meeting of the Governor's Marriage Commission, one of the points considered was the incorporation within the law of a delay of two to four days after filing "declaration of intent." This point was thoroughly covered in the discussion and only when the decision was made to have blood specimens, reports from laboratories, etc., sent through the mails was the question settled to the satisfaction of all members of the Commission. It was felt that such a procedure assured the lapse of a minimum of two days after the blood specimens were taken. Now it seems that the commission overlooked the old adage, "Love will find a way." To which might be added, "When county clerks and the medical profession offer the proper assistance."

The law became effective on March first of this year and for a few weeks it very decidedly slowed up the various Gretna Greens of Indiana. But not for long! In one of the more notorious "Greens" it now is possible to have a complete blood report within four hours after a call upon the physician, even though the blood specimen and the laboratory report must be sent through the mails. It is an ingenious procedure and one that requires the connivance of attaches in the office of the county clerk, the physician, and the laboratory, for each of these factors must "click" else the plan will not be successful. The plan involves the rental of special postoffice boxes and a messenger service from the doctor's office to the laboratory in another city. In the short time that the scheme has been in operation, the number of marriage licenses issued in this particular county has been increased to a great extent. That the plan is remunerative to the participating doctors is evidenced by the fact that the record shows that one physician, immediately after the scheme was put into operation, made seventeen such examinations within a period of six days. Soon after that, when the machinery had gotten well oiled and the word went out that delays were at the minimum, a period of twenty-two days netted this enterprising physician some seventy-one such examinations. It is said that his fee is six dollars per couple, plus a substantial "service charge."

Several physicians are said to be involved in the plan, though one of them, because he lives in the county seat town, seems to have the "inner rail" and is doing quite a thriving business. The local medical society has investigated the plan and reports that nothing is found to be illegal about the procedures. However, the fact remains that it is a successful attempt to upset the intent of the law and, in our opinion, is far beneath the dignity of a member of the medical profession. More frankly, we regard it as a highly indecent procedure and one that will reflect unpleasantly upon the entire profession.

Editorial Notes

We have already applied for the job of Business Agent for our local (Lake) county medical society if and when the profession of medicine is declared to be a "trade." Oh, Boy! We have some ideas as to how to operate such a job!

* * *

Ten days from now the annual meeting of the American Medical Association will open in New York City. Looking over the program, we find it unusually instructive and well worth the time spent in attending. It might be well to remember, however, that while *members* of the American Medical Association will be permitted to attend the sessions, only *fellows* are eligible to register.

* * *

Recently a definition of the word "pediatrician" was given by C. B. Summers, writing in the *Journal of the Missouri State Medical Association:* "The pediatrician is a general practitioner for children." The more we think of it, the more we are convinced that this is a perfect definition of this type of specialist. To be a good pediatrician one must *know* practically the entire field of medicine!

* * *

Governor Lehman of New York has signed the Wilson bill, recently enacted by the legislature of that state, which calls for a maximum award of five thousand dollars to victims of industrial silicosis, the former maximum being three thousand dollars. In addition, the hospitalization period has been extended to one year. It is felt that such an award will give many of the victims opportunity

for rehabilitation after they have recovered from the ravages of the disease.

* * *

Beauty parlor addicts will do well to listen to a warning issued recently at a meeting of the American Dental Association, in Baltimore, when Dr. Walter S. Thompson, of Los Angeles, suggested that it would be well for women who are to have dental x-rays to delay their visit to the beautician until *after* calling on the dentist. The speaker suggested that lead, mercury and other minerals so commonly found in cosmetics absorb the x-rays to an unusual degree, resulting in more or less serious burns. So, to play safe, "see your dentist, first."

* * *

It seems that another A.M.A. publication has gone culinary, this time the big sheet, itself! A recent number of *The Journal of the American Medical Association* (April 6, 1940) carries a story to the effect that fast-frozen foods are given an official O. K. We've known that for a long time, but had that publication mentioned the fact that these foods are vastly improved when cooked in patapar paper, they would have conferred an additional boon upon doctors who like to eat good things. Concerning another kitchen note, carried in the March number, we might observe that we had but one kick-back, and that was from Olin West, genial secretary of the A.M.A., who wanted to know "when we got to be such an all-fired good cook."

* * *

Magnuson and Raulston in the *Journal of the A. M. A.* for April 20, 1940, report a series of eight cases of lead poisoning in roofers who were accustomed to holding roofing nails in their mouths while at work. Some of the men had been so employed for ten or more years without signs of lead poisoning, but it was found that a recent change had been made in the type of nails used for this purpose. The new nails were galvanized and the zinc coating showed as much as 0.9 to 4.7 per cent of lead content. They also made tests showing that thirty nails, deposited in saliva, gave off as much as four micrograms of lead. The men were not exposed to lead in any other way, hence the etiology of the poisoning was well determined. This is but another instance of the necessity of being constantly on the watch for unusual causes of disease in modern industry.

* * *

For some time we have said little about one of our pet projects, that of preventing the pollution of the natural waters of Indiana, meaning our streams and lakes. It is quite some time since the last legislative enactment and Board of Health order was passed and it would seem that the offenders have had sufficient time in which to alter their plans for waste disposal. In the Lake County area, where several cities have dumped raw sewage into Lake Michigan for many years, sewage disposal plants are under construction and we are assured that within a few months there will be no complaint on this score. There are many other offenders, judging from reports from over the state, who have made little or no effort to remedy the conditions complained of and we are of the opinion that it is high time that they be haled before the proper authorities for these violations.

* * *

In this issue of THE JOURNAL there appears an article on the care of the medically indigent prepared by Mr. Leo X. Smith, legal advisor for the Township Trustees' Association. The article covers the subject very well. It deals wholly with the legal phases of medical care of the indigent. Dr. J. S. Leffel of Connersville, chairman of the Medical Relief Committee of the Indiana State Medical Association, has expressed the opinion that, in the face of difficult situations, more satisfactory results may be obtained through negotiation, diplomacy, and cooperation of all persons concerned. The indigent will get better care and will be better satisfied when each person involved (the patient, the hospital, the doctor, and the overseer of the poor) has a cooperative attitude toward all others concerned in accomplishing the purpose—adequate care for the indigent. Cooperation, willingness to work together, will go far toward eliminating much of the friction and necessity for legal aid in caring for medically indigent people.

* * *

Northwest Medicine for March, 1940, editorially discusses "Our Smallpox Disgrace," citing the prevalence of this wholly preventable disease in Oregon, Washington, and Idaho. These states, comprising a population of about 2.5 per cent of that of the entire country, had almost fifteen per cent of the smallpox of the nation. The editorial makes clear the fact that while much of this situation is the fault of the public, the fact remains that the medical profession is lax in its duties in the matter of educating its clientele to the advantages to be derived from "wholesale" vaccinations. This situation is not limited to the Northwest; Indiana might do well to heed the suggestion. It should be remembered that not so very long ago Indianapolis and other central Indiana sections had a sizable epidemic of this disease and there is cause to believe that history may repeat itself at almost any time. It seems that smallpox, in near epidemic form, is necessary to convince folk that vaccination is quite in order at all times.

Much has been said concerning the issue of special stamps by the present Postmaster General, James Farley, of New York, who has outdone all previous records along that line. We do not care to take issue in the matter; our only comment is concerning one of these issues that in itself is epoch-making—the stamp issued in memory of the late Booker T. Washington, one of the greatest educators in American history. We were pleased, the other day, to receive a message from Dr. and Mrs. Robert M. Hedrick, of Gary, the envelope carrying a "first issue" of this stamp, the first sheet having been sold to the Tuskegee Alumni Association of which Dr. Hedrick is a member. In his address commemorating the occasion, Mr. Farley chose to state that this was a belated tribute to a great man and that recognition of the principle that "merit, no matter what color the skin," deserves its reward.

* * *

We've listened to many stories that sick people have told us and often have expressed our sympathy, but in the future a patient who relates the sordid details of an old-fashioned renal colic will find our ears unusually sympathetic. In fact, we'll moan with 'em. A year or more ago we had such an attack and at that time thought we had had everything, but it took a second seance, this time on the opposite side, to put us completely down. Seems that a good-sized boulder became detached from somewhere in the neighborhood of the renal pelvis and decided to go *en tour*, and its passage along the only outlet was accompanied by much pain—and we mean *pain!* Some two days later, along about the time we thought the thing had completed its journey, a lineal descendant of said boulder (about the size of a marble) decided to follow its parent into unknown lands, with the usual degree of accompanying distress. Suggestions as to measures leading to a future avoidance of such calamities will be gratefully acknowledged.

* * *

In the last several issues of THE JOURNAL, various advertisers have offered samples or literature (sometimes both) to the physicians who will take the trouble to complete and mail a coupon. It isn't much trouble to write your name and address (or have your office assistant do it for you), but your doing it means much to your JOURNAL. When an advertiser uses a coupon with his advertisement, he expects replies and he values his advertising by the number of replies received; if none is forthcoming, he decides that the medium is worthless (who can blame him?) and there is no renewal of advertising contract. This is *your* JOURNAL, and your support of its advertisers is essential. When a detail man calls upon you, ask him if his company is represented in your JOURNAL. If it is not, find out why not. It is to your own advantage to support JOURNAL advertisers, not only from the standpoint of helping your own official publication but also from the standpoint of patronizing trustworthy firms whose products can be depended upon.

* * *

Physicians interested in outdoor sports of various sorts, even though their activities in these lines be limited to the viewing of Dame Nature in her loveliest moods, will be interested to learn that Hovey Lake 'way down in Posey County now belongs to the State of Indiana and is under the jurisdiction of the Department of Conservation. Some seventy-five per cent of the purchase price, amounting to $20,000, came through the Pittman-Robertson State Aid Fund, the balance being furnished by the Department of Conservation, this being derived from the fees paid by Indiana sportsmen for hunting and fishing licenses. Thus do we gain, without additional taxes of any sort, a very much worth-while addition to the many beauty spots in Indiana, all of which have come to us through the Department. Physicians touring southern Indiana this year are advised to include a visit to this place and, as a further suggestion while doing so, arrange to spend a few hours in New Harmony on the way down. This little community, of much historic interest to all Hoosiers, long has been worthy of a visit from you but now that it is being "restored" and much of it has been taken over by a special Commission, it will afford even more pleasure and historical interest.

* * *

Have you noted the articles on heart diseases which have appeared in the daily papers during the past month? They were prepared by the Bureau of Publicity of the Indiana State Medical Association. The releases already published constitute the first of a series of twelve subjects that will be similarly treated—the twelve leading causes of death in Indiana. In order according to their mortality rates (1938) they are:

1. Heart Disease
2. Cerebral Hemorrhage
3. Cancer
4. Accidents
5. Pneumonia
6. Nephritis
7. Arteriosclerosis
8. Tuberculosis
9. Suicide
10. Diabetes Mellitus
11. Influenza
12. Infant Diarrhea.

The articles are partially intended to help remove that element of fear in regard to disease which produces today's numerous hypochondriacs, many of whom have reached the fear state as a result of medical propaganda in the lay press. A few concise and correct facts in regard to these twelve "killers" will, it is hoped, be helpful in assisting laymen to seek proper attention when it is needed as well as to allay their fears in regard to these diseases. Requests from laymen for copies of the articles on heart diseases indicate a lively interest. The Bureau will appreciate your comments on these articles.

President's Page

M-DAY

Ever since the days of George Washington, thoughtful individuals have clamored for some definite system of national defense. The appeal fell on deaf ears until after World War I when the American Legion sponsored legislation that resulted in the National Defense Act of 1920. The progress made in that direction finds us about half way between where we were at the beginning of 1917 and where we should be in 1940.

Recent events in Europe especially, but also in many other parts of the civilized (?) world, remind us of the wisdom of such a policy and we find ourselves faced with no alternative but the provision of an adequate defense. Every citizen of this country must keenly realize that it should take precedence over all other governmental activities.

The American public sees two pictures: The country armed to the utmost in all its branches of military service and with a determined conviction to fight for the preservation of our independence and freedom of existence on the one hand, or the ominous spectacle of being over-run by hordes of force and violence with a reversion to savagery unthinkable, and the sacrifice of all that represents our ideals in civilization.

It would seem repulsive to the rational mind that such a condition should or could exist, and yet should the Allies lose the present war and should England lose her navy, it would certainly seem to devolve upon us to make such provision for defense as could not have been dreamed of even a short time ago. We have a neighbor to the south with a definite communistic type of government, and world distances have been shortened until our isolation has been practically destroyed.

In totalitarian types of government always a few men rule. Personal liberty is bound to be destroyed. The dictator respects neither the rights of the individual nor the mass. The one law he, like any other brigand, does respect is that of force. He considers it his religion to inflict his ideological type of government on other peoples.

The cost in personal sacrifice, in service, and in taxation to attain and maintain such a defense is bound to be tremendous, but we would seem to have no other choice. Wishful thinking will not help us. "Tramp, tramp, tramp!" will not be written of future troops. Airplanes, armored tanks, and mechanized equipment will cause a change in song and verse.

The impelling conviction that there no longer can be any delay finds industry on the move toward mobilization. The government has every industrial plant in the United States indexed and knows the type of war necessity it can produce and its capacity. The War Department has the plans for M-Day worked out to the minutest detail.

The Indiana State Medical Association was foresighted when it provided for an M-Day Committee. We also have been fortunate in obtaining such an efficient personnel. The Committee looks toward avoidance of the harrowing delays and costly misfits of 1917 which can be accomplished only by voluntary cooperation of the profession of the State. At any rate, we have the machinery set up to provide the most efficient mobilization of the medical profession and to aid in securing the most advantageous conditions for other members.

Let us hope and believe that with proper and prompt measures taken for defense, M-Day will never come.

Karl R. Ruckell

THE LAKE COUNTY SYPHILIS SURVEY

J. S. NIBLICK, M.D., A. W. RATCLIFFE, M.D. and E. M. SHANKLIN, M.D.
HAMMOND

A few years ago, Surgeon-General Thomas Parran of the United States Public Health Service inaugurated an antisyphilis campaign, declaring that this disease was a menace to public health, that it could be eradicated, and that it should and would be eradicated. Over a period of several months plans were formulated, but not until the Secretaries-Editors' Conference was held in Chicago in November, 1937, were those plans announced. That conference endorsed Dr. Parran's program *in toto* and those in attendance pledged to carry the information back to their respective states.

Various analyses of the prevalence of syphilis in different sections of the country were made from time to time, and it was decided to make surveys in certain of these districts. Lake County, Indiana, was chosen as one of these, primarily because of the varied population of the county which is the center of a great industrial area in so-called Chicago-land. The Indiana State Board of Health was invited to participate in the survey as well as the local medical society.

The set-up of the survey consisted of a committee from the Lake County Medical Society, composed chiefly of the health officers of the four major cities therein, together with a survey director and a representative from the Indiana State Board of Health. A full time field officer and investigator was engaged. The State Board of Health installed in the Hammond City Hall a complete laboratory with a director and a technician where all the serological examinations were made.

Lake County comprises a population of approximately 300,000 representing practically every known race and nationality. It is estimated that there are 45,000 Negroes in the county. About 250 physicians, most of whom are members of the local county medical society, are engaged in the practice of medicine there. Two venereal disease clinics and 166 of the 250 physicians cooperated in the survey in varying degrees. For example, there were 10,625 blood specimens submitted by 166 physicians, 44 of whom sent 10 or less specimens each, 105 sent between 11 and 100 specimens each, and 17 sent more than 100 specimens each. In the group of 44, less than 5 specimens were sent by each of 26 physicians and 12 sent only one each. In the group of 17, there were 8 who sent more than 200 specimens and 5 sent more than 500 specimens each. These 10,625 specimens were received by the laboratory in the period from January 15, 1939, to June 30, 1939.

Of the blood specimens sent in, 0.95% were broken in transit, 0.04% were broken in the laboratory, 1.7% were hemolyzed, and 0.16% were of insufficient quantity for testing. This left 10,253 specimens actually tested.

Each specimen was subjected to the Mazzini flocculation test and to the Kline diagnostic test. Those which failed to give negative results with these tests were subjected to Kahn standard tests. (For a short time at the beginning of the period, Kahn tests were not done at the survey laboratory but the positive sera were checked by the modified Kahn test at the State Board of Health Laboratory in Indianapolis.)

LABORATORY RESULTS

In tabulating the results, the following criteria have been used:

(a) positive: a positive (3-plus or 4-plus) reaction with one test with positive or doubtful (1-plus or 2-plus) support by at least one other test;

(b) negative: a negative result with the Mazzini and Kline tests;

(c) doubtful: other combinations.

In the occupational classification only the major groups are tabulated; the composition of these groups follows:

Professional: clergymen, religious workers, dentists, nurses, physicians, other practitioners, teachers, and hospital dieticians.

Farmers: Owners, tenants, and dairymen.

Managers-dealers: Managers, wholesale dealers, retail dealers, hotel keepers and managers, inspectors, merchants, managers and officials, undertakers and restaurant, cafe or lunchroom keepers.

Clerks, salesmen: clerks, salesmen, secretaries, stenographers, cashiers, mail carriers, messengers, and traveling salesmen.

Skilled workers and foremen: millwrights, machinists, toolmakers, molders, founders, casters, painters, plasterers, cement finishers, and railroad engineers.

Semi-skilled workers: attendants at state institutions, bartenders, manufacturing operatives, other railroad workers, switchmen, motormen, structural ironworkers, taxi operators, bakers, butchers, and milk delivery men.

Farm laborers: farm day laborers.

Other common laborers: day laborers, draymen, teamsters, hucksters, and miners.

Domestic Service: hairdressers, manicurists, barbers, bell-boys, chambermaids, porters, janitors, sextons, housewives, waiters, and cooks.

Unclassified, indefinite and unknown: inmates, no occupation, retired, prostitute, relief (W.P.A., etc.), student, preschool, and food handlers unspecified.

The Tables 1, 2, and 3 present the actual results and require no further explanation. The results according to marital status are not shown since

Table 1

RESULTS OF BLOOD TESTS BY RACE AND SEX WITH REASON FOR TEST

Reason for Test and Results	Race and Sex: White Males	White Females	Colored Males	Colored Females	Unknown Unknown
ALL REASONS					
Total	4699	2810	1347	1211	186
Positive	573 (12%)	328 (11.6%)	475 (35.3%)	477 (39.4%)	47
Doubtful	151 (3%)	91 (3.2%)	84 (6.7%)	108 (9.0%)	12
Negative	3975 (85.0%)	2391 (85.2%)	788 (58.0%)	626 (51.6%)	127
DIAGNOSIS					
Total	4241	2553	1220	1058	156
Positive	356 (8.4%)	197 (7.7%)	408 (33.5%)	383 (36.3%)	35
Doubtful	99 (2.1%)	60 (2.3%)	71 (5.8%)	91 (8.6%)	9
Negative	3786 (89.5%)	2296 (90.0%)	408 (60.7%)	584 (55.1%)	112
TREATMENT CHECK					
Total	311	190	105	123	16
Positive	204 (65.6%)	127 (67.0%)	58 (55.2%)	81 (65.8%)	12
Doubtful	49 (15.7%)	27 (14.1%)	11 (10.5%)	15 (12.2%)	1
Negative	58 (18.7%)	36 (18.9%)	36 (34.3%)	27 (22.0%)	3
UNKNOWN REASON					
Total	147	67	22	30	14
Positive	13	4	9	13	—
Doubtful	3	4	2	2	2
Negative	131	59	11	15	12

Table 2

DIAGNOSTIC BLOOD TESTS WITH RESULTS BY RACE, SEX AND AGE (EIGHT CITIES)

Race, sex and age group	Total	Positive	Doubtful	Negative	Race, sex and age group	Total	Positive	Doubtful	Negative
GRAND TOTAL	9228	1379	330	7519	TOTAL COLORED	2278	791	162	1375
UNKNOWN COLOR OR SEX	156	35	9	112	COLORED MALES	1220	408	71	741
TOTAL WHITE	6794	553	159	6082	less than 1 yr.	—	—	—	—
WHITE MALES	4241	356	99	3786	1-4 yr.	4	—	1	3
less than 1 yr.	1	—	—	1	5-9 yr.	13	—	—	13
1-4 yr.	6	—	1	5	10-14 yr.	13	2	—	11
5-9 yr.	19	—	—	19	15-19 yr.	39	5	1	33
10-14 yr.	49	2	2	45	20-24 yr.	162	44	4	114
15-19 yr.	185	2	4	179	25-29 yr.	226	66	12	148
20-24 yr.	608	21	3	584	30-34 yr.	216	70	18	128
25-29 yr.	555	25	8	522	35-39 yr.	197	80	11	96
30-34 yr.	652	52	12	588	40-44 yr.	146	56	6	84
35-39 yr.	520	48	13	459	45-49 yr.	86	34	7	45
40-44 yr.	473	64	12	397	50-54 yr.	54	19	3	32
45-49 yr.	419	60	13	346	55-59 yr.	35	10	6	19
50-54 yr.	341	37	12	292	60-64 yr.	17	9	1	7
55-59 yr.	206	26	13	167	65 and over	8	3	1	4
60-64 yr.	110	9	4	97	unknown age	4	—	—	4
65 and over	70	8	1	61	COLORED FEMALES	1053	83	91	584
unknown age	27	2	1	24	less than 1 yr.	—	—	—	—
WHITE FEMALES	2553	197	60	2296	1-4 yr.	5	—	—	5
less than 1 yr.	3	—	—	3	5-9 yr.	14	1	1	12
1-4 yr.	5	1	—	4	10-14 yr.	14	1	—	13
5-9 yr.	26	—	—	26	15-19 yr.	98	16	2	80
10-14 yr.	44	2	4	38	20-24 yr.	187	65	14	108
15-19 yr.	269	3	8	258	25-29 yr.	196	79	8	109
20-24 yr.	671	32	11	628	30-34 yr.	173	75	12	86
25-29 yr.	413	40	5	368	35-39 yr.	144	63	19	62
30-34 yr.	308	33	12	263	40-44 yr.	95	36	17	42
35-39 yr.	203	18	7	178	45-49 yr.	65	26	12	27
40-44 yr.	167	25	5	137	50-54 yr.	31	9	1	21
45-49 yr.	165	17	4	144	55-59 yr.	16	7	1	8
50-54 yr.	107	13	1	93	60-64 yr.	9	1	2	6
55-59 yr.	58	5	2	51	65 and over	8	3	2	3
60-64 yr.	31	2	—	29	unknown age	3	1	—	2
65 and over	58	4	1	53					
unknown age	25	2	—	23					

Table 3

DIAGNOSTIC BLOOD TEST RESULTS BY RACE, SEX AND OCCUPATION

Occupation	Total No.	Percent Pos.	Percent Doubtful	Percent Neg.	Occupation	Total No.	Percent Pos.	Percent Doubtful	Percent Neg.
Occupation: White Males					**Occupation: Colored Males**				
Professional	50	2.0	2.0	96.0	Professional	11	45.5	0.0	54.5
Farmers, Tenants	41	0.0	4.8	95.2	Farmers, Tenants	0	0.0	0.0	0.0
Managers, Dealers	130	2.3	1.5	96.2	Managers, Dealers	4	75.0	25.0	0.0
Clerks, Salesmen	249	6.1	2.0	91.9	Clerks, Salesmen	8	25.0	0.0	75.0
Skilled workers (foremen)	898	7.3	2.7	90.0	Skilled workers	39	38.4	7.7	53.9
Semi-skilled workers	541	5.0	2.9	92.1	Semi-skilled workers	28	32.0	11.0	57.0
Farm laborers	5	0.0	0.0	100.0	Farm laborers	0	0.0	0.0	0.0
Other common labor	1479	11.8	1.4	86.8	Other common laborers	736	35.0	6.8	58.2
Domestic Service	136	9.5	5.1	85.4	Domestic service	45	46.6	11.1	42.3
Unclassified, indefinite and unknown	712	7.8	3.1	89.1	Unclassified, indefinite and unknown	349	27.8	3.1	69.1
Occupation: White Females					**Occupation: Colored Females**				
Professional	65	0.0	0.0	100.0	Professional	4	50.0	0.0	50.0
Farmers, Tenants	2	0.0	0.0	100.0	Farmers, Tenants	0	0.0	0.0	0.0
Managers, Dealers	31	0.0	0.0	100.0	Managers, Dealers	0	0.0	0.0	0.0
Clerks, Salesmen	212	1.4	2.3	96.3	Clerks, Salesmen	17	17.6	5.9	76.5
Skilled workers	6	0.0	0.0	100.0	Skilled workers (foremen)	0	0.0	0.0	0.0
Semi-skilled workers	12	0.0	0.0	100.0	Semi-skilled workers	2	0.0	0.0	100.0
Farm laborers	0	0.0	0.0	0.0	Farm laborers	0	0.0	0.0	0.0
Other common laborers	68	4.4	2.9	92.7	Other common laborers	24	33.3	16.7	50.0
Domestic Service	1644	9.4	2.7	87.9	Domestic Service	695	39.4	9.4	51.2
Unclassified, indefinite and unknown	513	7.2	1.7	91.1	Unclassified, indefinite and unknown	316	30.4	6.6	63.0

Table 4

SYPHILIS SURVEY OF LAKE COUNTY: JANUARY TO JUNE, 1939
CASES OF SYPHILIS UNDER TREATMENT

Age	Race	Stage Not Stated Male	Fem.	*NS	Early Male	Fem.	NS	Latent Male	Fem.	NS	Tertiary Male	Fem.	NS	Congenital Male	Fem.	NS	Totals Each Sex Male	Fem.	NS	Totals Each Race	Total Cases
Age Not Stated	C			1				25							1		25	1	1	27	
	W				3	3		53	9		1			1			58	12		70	
	NS*							2				1					2	1		3	100
Under 5 Years	C				2												2			2	
	W								1						1			2		2	
	NS																				4
5 to 12 Years	C				2	5						1		3	3		5	9		14	
	W							1	1					2	3		3	4		7	
	NS																				21
13 to 20 Years	C				15	28		8	17			1		3	7		26	53		79	
	W				6	14		3	10			2		6	10		15	36		51	
	NS																				130
21 to 48 Years	C	4	4		181	208		293	287		36	41		10	14		524	554		1078	
	W	4	2		129	70		268	194	1	101	49	2	13	14		515	329	3	847	
	NS																1			1	1926
Over 48 Years	C	1			15	1		35	25		12	2			1		63	29		92	
	W	1			18	6		65	30		62	14		1			147	50		197	
	NS											1						1		1	290
Total	C	5	4	1	215	242		361	329		48	45		16	26		645	646	1	1292	
	W	5	2		156	93		390	245	1	164	65	2	23	28		738	433	3	1174	
	NS							3				2					3	2		5	2471
Colored & White		10	6	1	371	335		754	574	1	212	112	2	39	54		1386	1081	4	2471	2471
GRAND TOTAL			17			706			1329			326			93			2471		2471	2471

* Not Stated.

this tabulation did not seem to show any significant variation in the incidence of positive tests.

SYPHILIS MORBIDITY SURVEY

A survey made by canvassing each physician in the county showed that 2,471 patients were receiving anti-luetic treatment during the period January 1939 to June 1939, inclusive. A tabulation of these cases by race and age with sex and stage of the disease is presented in Table 4.

ADDITIONAL FIELD AND FOLLOW-UP WORK

Through the efforts of the field officer and survey office it has been possible to return 735 lapsed patients to private physicians for treatment, while 699 lapsed patients were found to be poor and needy and were transferred to free clinics during the life of the survey up to March 30, 1940. During this same period the following drugs have been issued from the survey office to physicians of the county for their poor and needy patients: 23,860 gm. neo.; 3,540 gm. mapharsen; 36,975 cc. bismuth.

COMMENT

It appears that the bloods tested do not represent a true cross-section of the population of the county nor of office practice (of medicine) in the county. It seems quite probable that the error in each instance tends to give a higher percentage of positive results than would be obtained in a true cross-section, because it is to be expected that office practice would contain a greater percentage of luetic individuals, perhaps presenting clinically because of divers complaints, and that the physician who took only occasional blood specimens would be more likely to pick those of whom he was suspicious. This is somewhat counterbalanced by the fact that those physicians who sent the largest numbers of specimens obtained what may be considered a fairly good cross-section of the general population as well as of their office practice. It is only fair to point out that an unknown number of blood specimens were tested in various private, municipal, and hospital laboratories in the county and elsewhere.

It should be mentioned that out of 214 individuals who applied for registration in the Lake County Medical Society Blood Group Registry, only 1 positive blood was found.

The opportunity is taken here to restate our belief that positive blood tests alone do not establish the diagnosis of syphilis nor do negative tests always exclude it. The criteria used here for the classification of positive, negative and doubtful results were chosen only after some considerable study[1] had indicated that our results warranted their use.

While the factor of error causing deviation from a true cross-section of the population of the county remains quantitatively uncertain, these results are presented with the hope that they may be of some interest and not altogether uninformative.

In addition to the figures compiled from the survey laboratory, we have access to the serological examinations of employees and applicants for employment in five of our larger industries; the percentage of positives in this group averages from 4.6 to 5.6. For example, in one of our large steel companies, 6,100 employees and 3,900 applicants for employment were given blood tests which showed approximately 5% positives.

We also have checked the findings in connection with blood checks of applicants for a barber's license; this was done some months before beginning the survey. Of the entire group checked, over the state, the report shows a total of 59

[1] A. W. Ratcliffe: The Mazzini Test: A Greater Aid in the Serodiagnosis of Syphilis. Accepted for publication by *Jrnl. of Lab. and Clin. Med.* but not yet published.

positives, 6 of whom were from Lake County. Of the beauticians checked, the state total was 117 positives, of which 11 were in Lake County.

At the beginning of the survey, we experienced some difficulty in convincing employers that one infected with syphilis, provided that person was under active treatment, did not constitute a menace. However, in a short time this problem became less acute. It might be cited that as of January 1, 1940, 1,143 men and 172 women were working in Lake County, through the "survey control system."

As to the results of the survey, which is being continued, those directly connected with it have conservatively estimated that in Lake County there are approximately 25,000 cases of syphilis; of this number (as of July 1, 1939), 2,471 or approximately 10% were under treatment.

PHYSIOLOGY AND PATHOLOGY AND THEIR OVERLAP

A GRATIFYING feature of medical science today is the ever-increasing overlap between the study of pathology and that of the normal body. Not so long ago the lines of demarcation between morbid and normal anatomy and between morbid and normal functioning were precise and rigid; the expert in one specialty denied the possession of even elementary knowledge in the other; the currents of research also flowed apart and refused to mix. Today we find the frontiers more and more difficult to define and directors of pathological laboratories will be found to have undergone a rigid discipline in physiological study and investigation and *vice versa*. The medical curriculum, always conservative, preserves much of the former detachment of the normal and diseased, and students, at least up till quite recently, often entered upon clinical study without the slightest idea of what their tutors were talking about when such subjects as inflammatory reaction or the processes of bone repair were being discussed. There are, of course, many branches of human physiology in which the approach must be largely pathological. Modern knowledge of the functioning of the central nervous system, deprived of the clinical contribution, would be an exiguous remnant and much the same might be said of the study of the endocrine glands. The body responses in the production of immunity are occurring continually in the best of health and can hardly be labelled as disease reactions. Trauma may perhaps be put forward as essentially pathological, yet there are instances of physiological trauma as in the eruption of teeth, the severance of the umbilical cord and even in the separation of the placenta. The study of muscle and nerve functioning still remains remote from the investigation of diseased states; this is due partly to the ease of animal experimentation and to the undoubted fact that the mechanisms of muscle contraction and of the propagation of the nervous impulse are the same in all animals, at least in all vertebrates. Still the generalization can be made that the more human the study of physiology becomes, the greater is the donation from pathological observation and experiment.

From time to time the thesis has been advanced, and then lost sight of, that many pathological reactions have counterparts in normal bodily happenings. The obliteration of the *ductus arteriosus* and the sealing of the *foramen ovale*, did they occur as aberrances, would be described as typically morbid happenings. The involution of the post-parturient uterus bears a striking resemblance to certain degenerations classified as diseased, whilst hypertrophy and atrophy are manifested by a number of healthy organs. Many beautiful examples of the gradual transition from the normal to the morbid can be found in those self-regulating devices in which the body abounds. W. Ostwald was the first to announce as axiomatic that when an equilibrium is due to self-regulating adjustments that equilibrium must be oscillatory. A typical example is the thermostat in which the heat supply is automatically cut off when the desired temperature is exceeded. In the best thermostats the temperature is never really constant, but the amplitude of the excursion of the thermometer is reduced as far as possible. Through the governor of an engine approximate uniformity of engine movement is brought about, but should the governor lose sensitiveness, or lag, then the engine shows periodicity in action or "hunts"; as the late J. S. Haldane pointed out, Cheyne-Stokes breathing is a typical instance of a governor "hunting." The diurnal variation of the temperature of the body in repose may be as much as 1.75° F.; anything above this is regarded as pyrexic though it may not necessarily be so. When a limb is given a certain posture by muscular action alone, and not by physical support, the limb shows tremor which in health may be detectable only when magnified by appropriate instruments; but when the tremor is obvious as in self-consciousness or fatigue it acquires semi-pathological complexion, whilst in the grosser forms associated with cerebellar lesion or disseminated sclerosis there is no doubt about the classification. That the eyeball in health manifests tremor modern methods have demonstrated, and indeed the effects of such were known to the pointilistic artist; but when we encounter nystagmus we have no hesitation in proclaiming it pathological. A fruitful field for investigation awaits here both pathologist and physiologist, for if such body constants as arterial pressure, erythrocyte count, and the volume, reaction and composition of the blood are regulated automatically, then an oscillatory equilibrium must be present, though with amplitudes of variation which in health escape ordinary observation, but the exaggeration of which would bring the condition into the realm of the diseased.

Perhaps it is in psychology that the overlap between normal and pathological is so wide. Tracking back perturbed mental states and activities to early experiences and urges, thwarted or intensified, has made some wonder how few people really are completely sane; but the query might be inverted and in all good faith we might ask how many of the allegedly aberrant are normal or close to normal. We are slowly approaching this attitude in our consideration of sexual abnormalities. A very pretty example of the existence of an innocent miniature of a pathological nervous condition is seen in the handwriting of the great majority of persons whose health could not be called in question, and this is the dissimilarity of double letters when written quickly and without special attention. Most people make the second letter markedly divergent from the first. Should we call this a physiological adiadochokinesis?

These and other instances which will suggest themselves indicate that increasing overlap and correlation between physiology and pathology are to be welcomed, and that one method of fostering this reciprocal assistance is to bring the physiological laboratory into closer association, physically and spiritually, with the hospital.

—MEDICAL JOURNAL OF AUSTRALIA, March 2, 1940.

DOCTOR?

A story is recalled of the hillbilly sitting underneath the tree and howling with pain. A sympathetic passer-by watched for a few minutes and then said, "What is the matter?"

The hillbilly replied, "I'm siting on a tack."

Almost every doctor of medicine is howling with rage because the quacks use the term "doctor." There are none of the barnacles on the ship of Healing Arts who dare to use the degree M.D.

Why not move off the tack?

Use "M.D." on your door and stationery!—*Journal Michigan State Med. Soc.*, April, 1940.

MEDICAL AND HOSPITAL CARE OF INDIGENTS BY TOWNSHIPS

LEO X. SMITH, Legal Adviser,
Indiana Township Trustees Association,
Indianapolis

Questions regarding financial responsibility for care and attention of indigents by hospitals and physicians, from township poor relief funds, arise often.

Indiana poor relief laws make ample provision for indigent care but their application is not generally understood. Township care is but one of many methods used to aid the indigent. There are state, city, county and veteran hospitals, also various state institutions which provide facilities for indigents, but those institutions and methods of admission or pay for services therein, will not be discussed. Only the care of indigents at township expense will be commented on. A few observations and suggestions are made, hoping that they will be helpful to all concerned.

It should be clearly understood that ordinarily a township is not liable for medical or hospital care to indigents, unless there be prior authorization from the township trustee which should be in writing except, however, in genuine emergencies.

Liability for the care of paupers or indigents is only based upon statutory law. However, society and especially our courts are agreed that indigents should receive proper attention if they come within a reasonable construction of our laws. Indiana has ample provision for the care of indigents and paupers but most misunderstandings as to liability for services rendered appear to result from a failure to properly observe the laws and regulations applicable.

Abuse of the opportunity to obtain medical or hospital care at the expense of township taxpayers when the applicant could pay should be discouraged. Physicians should make use of all available facilities for the care of indigents and not always rely upon township aid. Neither should physicians or hospitals encourage free aid at the expense of taxpayers when other reasonable arrangements could be made. Abuse of the privilege of indigent care only serves to subject those involved with the responsibility to criticism and antagonizes taxpayers against the principle of medical or hospital attention at public expense. Township trustees are also cautioned to recognize liability when it clearly exists, otherwise they may be subject to civil action for damages.

EMERGENCY CASES

In emergency cases needing medical or hospital care the township where the accident occurred or emergency arose is liable for the first and emergency care. That is true even though the indigent had settlement or residence in another township, or was a transient.[1,2,3]

If any person within the description of the poor person described in the law shall be found in a township, then the township where the person is found is required to provide proper care for him, whether he has legal settlement in that township or not.[4]

Usually, a case requiring "emergency" care is one which demands immediate attention to prevent death or grave complications. An emergency is a question of fact and not always the opinion of the one rendering such service. There has been no legal definition in Indiana for use as a general guide although in one case where a lad fell from a train, was injured and required amputation, and the trustee could not be reached, he was considered in need of emergency care without prior written authorization from the township trustee.[2]

Arbitrary classification of cases as "emergencies" is frowned upon because of the opportunities for abuse. The burden is on the hospital or physician claiming compensation without prior written authorization to show clearly that it was an emergency.

At the earliest opportunity those rendering emergency care must notify the trustee of the township where the emergency arose in order to hold that township liable. If it is further intended when a patient has settlement elsewhere that the township of his settlement is to take over the case and its liability, then the township of his settlement should be notified.

The township where the indigent was found and the first and emergency care is given is liable for continued care until notice is given the township where the indigent has settlement and to which the patient can be or is conveniently removed or to a place of its choice. The patient should either be moved to the township of his settlement or that township should accept responsibility for the patient by written authorization for his care.

The township is never liable unless the patient be an indigent and unable to pay for the services rendered or if a minor is not emancipated and his parents could not pay.[2] That does not necessarily mean immediate ability to pay if credit or other arrangements can be made. Sick and accident insurance also settlement for damages, if any, should be applied by the patient to the debt before the township is held liable. (It is hoped that in the near future a law will be enacted to provide a lien against sums paid in settlement for damages or compensation collected for injuries and illness.)

Townships cannot evade liability for emergency

cases by silence of the trustee. If township authorities be noncommittal, "then the necessary services may be rendered and the law imposes an obligation on the township to pay for such services."[2] Indeed, civil or criminal liability may involve the trustee for neglect or failure to perform his duty.

Except for the emergency part of any such care and attention and when the trustee cannot be first reached, the township is permitted to choose where and by whom the services will be rendered.

In no event will a township be liable for more than the ordinary cost of care and attention furnished, and in county hospitals, the actual cost thereof,[11] not exceeding $20 per week.

Sworn bills on proper claim forms for hospital and medical care against townships should be filed at the end of the month in which the obligation arose.[5] This is required and is so stated in the form adopted by the State Board of Accounts for medical care. Undue lapse of time before claims are presented to the trustee raises doubt as to liability. A mere "bill" for services rendered is not sufficient. It must be itemized and filed on the usual blank form for such claims accompanied by the indigent's detailed receipt for the services rendered. It would be well to retain a copy and obtain a receipt from the trustee for the claim when filed with him.

Before recovery can be had on an emergency claim, without prior written authorization for services rendered by a physician or hospital, these facts must be clearly shown: (a) The township where the emergency arose, (b) A genuine emergency, (c) Prompt notice to the township sought to be charged, (d) Indigency of the patient. There should also be the affidavit of emergency by those rendering the care, a report signed by the patient and a purchase order, all fully executed on blanks obtained from trustees and prescribed by the State Board of Accounts.

Should there be a denial of responsibility by the township, suit should be filed. If the claim is reduced to judgment, it must then be paid.

CASUAL AND NON-EMERGENCY CASES

Before granting hospital or medical care, medicines, special diets and nursing for indigents in non-emergency cases, a sworn application must first be filed by the applicant,[6] with the trustee. If a minor, not emancipated, it should be made by the father or other head of the household.

If hospital or medical care is granted, the trustee should first give a written order[5] on the usual prescribed form, designating the care to be given and the amount to be paid therefor. If necessary, additional written orders should be given from time to time. Recovery cannot be had for voluntary or unauthorized aid,[8] but must be based on a contractual obligation and agreement to pay. Written authorization should be obtained prior to rendition of the service, and patients should not be accepted without it (except in emergencies).

Hospitals should not accept "indigents" with mere instructions from physicians if it is intended that the township be held responsible for the care rendered. Prior authorization in writing from the trustee cannot be overemphasized.

Township authorities cannot arbitrarily deny medical or hospital aid by being non-committal or for an unlawful reason. If aid is denied, the applicant should, if possible, appeal to the county commissioners[7] from the refusal of the trustee to provide the necessary care. If that is impractical before the attention is required, it seems that in clear cases of necessity the township would be liable,[2] such situations being somewhat in the nature of emergencies.

The choice of the physician and the hospital rendering care is made by the township.

It is improper to furnish service and care with the understanding that if the patient does not pay, the township will. The patient is either recognized as an indigent at the time the service is rendered or he is not. Inability to pay when the services are requested does not necessarily make the applicant an indigent and entitled to township aid, if credit or other arrangements could be made for the service offered or provided.

Hospitals and physicians should not permit accounts to run over one month without filing claims. A "bill" should not be rendered but a complete itemized statement on the usual claim form and sworn to, together with required affidavits, should be filed with the trustee accompanied by the signed order and receipts signed by the indigent. Undue lapse of time before claims are presented implies doubt as to liability.

Township trustees have no authority to authorize medical, hospital or other aid to indigents who live in other townships[1] (unless in a case of emergency as explained above). For relief purposes, it makes no difference whether the indigent has statutory legal settlement in the township where he lives. So long as he is found in any township, "lying sick therein without friends or money," that township is responsible for his care as an indigent,[9] so long as he remains in that township.

Charges must not exceed their reasonable value and in county hospitals, the actual cost thereof,[11] not exceeding $20 per week.

THE "CHISELERS" LAW

If a patient be given care and attention as an indigent, but later his financial condition and ability to pay has materially changed, and that person continues to accept such assistance, hospitalization, or services and fails to report any such material change to the person or persons from whom such help is being received, then the recipient of that care may be punished with a fine of not more than $100 and imprisonment of not more than six months or both.[10] Patients who receive health and accident payments, damage settlements, or other income must report such receipts, which should be applied to the indebtedness incurred.

OTHER METHODS OF INDIGENT CARE

Public institutions providing medical or hospital care for indigents at public expense (other than through township poor relief) are:

Riley Hospital, for children under 16, "afflicted with a defect, disease or deformity, presumably curable or improvable by skilled medical and surgical treatment, or needing special study of diagnosis." Committed by circuit, criminal or juvenile court. Cost borne by county ordering commitment. Burns Indiana Statutes, 28-5406 to 28-5408. Crippled children under 16 are placed through county welfare board in Riley hospital. (Burns 52-1255 and those 16-21 in the Long hospital, 28-5422).

Indiana University hospitals (Long and Coleman). For persons over 16, "suffering from a condition or malady, not chronic, or deformity that is susceptible to improvement, cure, or benefit by medical or surgical treatment or hospital care or by special study or diagnosis." Committed by circuit, superior, criminal, probate or juvenile court. Cost borne by county ordering commitment. (Burns 28-5416 to 28-5423.)

County hospitals. For "the poor" of the "township of the county where such hospital is established." When committed by the trustee the "actual cost" not exceeding $20 per week is borne by the township. (Burns 22-3206 and 22-3237). Courts may commit sick and crippled indigent children under 16 to county and local public hospitals at the expense of county welfare boards. (52-501 to 503.)

City hospitals. For residents of cities where city hospitals are established such as Indianapolis. Admitted by direct application to hospital. Cost borne by the city unless patient able to pay.

Poor asylums. Cripples or persons suffering from incurable disease are often committed to the county farm or infirmary by trustees. The cost is borne by the county. (Burns 52-208.)

REFERENCES

[1] Burns Supplement, Indiana Statutes, 52-148, Acts 1935 p. 434, Sec. 5.

[2] Newcomber v. Jefferson Township, 181 Ind. 1, 103 N. E. 843.

Whitlock Clinic v. Carpenter, Trustee, (App.) 25 N. E. (2nd) 263.

[3] Burns Supplement, Indiana Statutes, 52-156, Acts 1939 p. 190, Sec. 2.

[4] Burns Supplement, Indiana Statutes, 52-161, Acts 1935 p. 439, Sec. 18.

[5] Burns Supplement, Indiana Statutes, 52-173, Acts 1935 p. 433, Sec. 30.

[6] Burns Supplement, Indiana Statutes, 52-152, Acts 1939 p. 435, Sec. 9.

[7] Burns Supplement, Indiana Statutes, 52-160, Acts 1935 p. 439, Sec. 17.

[8] 48 C. J. 539.

[9] Burns Supplement, Indiana Statutes, 52-162, Acts 1935 p. 439, Sec. 19.

[10] Burns Supplement, Indiana Statutes, Acts 1939 p. 641; 10-2120.

[11] Burns Supplement, Indiana Statutes, 22-3206, Acts 1939 p. 675, Sec. 3.

CORRESPONDENCE

To the Editor:

Dr. W. D. Gatch, in his address which opened the five-day postgraduate course of the I. U. medical school in Indianapolis last month, spoke of a situation in medical affairs that, viewed from its different angles, may let him be classed either as a Joan of Arc or a Don Quixote. I quote a few lines of his speech: "These various so-called medical educational drives, while they probably have had some beneficial effects, also have been misinterpreted by many people, and have made multitudes of hypochondriacs, obsessed by morbid fears of cancer, syphilis, tuberculosis, high blood pressure, food, birth, death, and have made of life a tragedy of fears. And he who fears too much about life will lose it. Our spectacular achievements have been made along lines of preventive medicine, in the control of infectious diseases and lowered infant mortality. A man of forty has no better chance of living to be eighty than he had a hundred years ago. Whatever benefits medicine has brought to the middle-aged have been balanced by the perils of modern life."

Certainly this country has been driven to the limit of not having weeks enough to permit all the uplifters and foundations and organizations to get their publicity and collect the sheckels that keep some high salaried individuals in luxury for the remainder of the year. Particularly easy marks are the various women's organizations which, under the spell of a field organizer, can always get some group to sponsor an apparently worthwhile movement. Along the same lines, and emphasizing Dr. Gatch's idea, we find Dr. James Ewing, our greatest cancer authority, quoted in *Time* magazine for May sixth, in which he says, "Too much has been expected from the modern advances in the diagnosis and treatment of cancer. Too much should not be expected from its prevention. In 65 per cent of all cancers, those in the esophagus, stomach, rectum, intestines, pancreas, kidney, lungs, and other internal organs, there are no early symptoms, and little or nothing can be expected from curative medicine under those circumstances. All the skill of our best surgeons has failed to affect the recorded death rate in major forms of cancer."

M. A. Austin, M. D., Anderson.

I.U. POSTGRADUATE COURSE
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UNDER THE CAPITOL DOME

The Indiana State Board of Medical Registration and Examination last month conducted a clinical examination for Illinois applicants for Indiana licenses under the reciprocity agreement, Ruth V. Kirk, secretary, announced. Ten applicants took the examination.

INDIANA'S POLLUTED STREAMS

Approximately 720 miles of polluted streams still remain in Indiana, exclusive of the Ohio river, and of this, about 100 miles is only seasonal pollution, according to B. A. Poole, chief engineer of the Indiana State Board of Health. In 1933 the state had a total of approximately 1,300 miles of polluted streams. "To the casual observer," Mr. Poole said, "removal of 580 miles of pollution may not appear to be such a great accomplishment, but when one considers that only a little more than 100 miles of stream pollution were eliminated between 1920 and 1933, the accomplishment becomes one of major proportions." There may be local cases of pollution which have not been spotted, and Mr. Poole pointed out that the east fork of White River and the section of the Wabash river between Logansport and Terre Haute have not been investigated, and it is entirely possible that there are cases of local pollution along these courses.

Indiana has no control over the Ohio river, Mr. Poole pointed out, and it is now generally conceded that the entire stretch of this stream is polluted to a degree which makes sewage and industrial waste treatment necessary. However, the amount of pollution which enters the Ohio from Indiana is relatively small.

In connection with Indiana streams Mr. Poole said: "While it is clearly recognized that Indiana has an industrial waste pollution problem, the major portion of the abatement activities of recent years has been directed toward pollution introduced through municipal sewers."

Reasons assigned by the Board of Health's engineer for this policy were:

1. Only a certain amount of work can be done annually by a limited personnel.

2. Generally speaking, pollution caused by domestic sewage is more dangerous than pollution caused by industrial waste.

3. Municipalities have had the opportunity to take advantage of Federal assistance in the form of grants-in-aid, whereas industries have been unable to do so.

As the situation stands today, approximately 75 per cent of the state's urban population is served by sewage treatment facilities, Mr. Poole said. Progress of sewage treatment has been great since 1920, when only 1.8 per cent of the urban population was served by sewage treatment. By progressive stages, the percentage grew to 23.5 per cent in 1930; to 24 per cent in 1933; to 47 per cent in 1936; to 49 per cent in 1938; and now to 75 per cent.

The cumulative cost of public sewage treatment projects that have been built in Indiana since 1920 totals $29,167,000, and of this total, about $12,893,000 has been spent for treatment works and $16,274,000 for intercepting sewers. It is interesting to note that approximately $25,000,000 of the $29,000,000 total has been spent since 1933, Mr. Poole said.

The engineers said that it is estimated that about 400 miles of the total pollution eliminated since 1933 has been brought about by the treatment of domestic sewage. The remainder, he said, can be credited to industrial waste treatment works or to a revision of industrial processes which eliminated pollution. "It is impossible to estimate the amount spent by industry in the elimination of stream pollution during the past twenty years, but proportionately, it has not been as great as that spent on the treatment of domestic sewage."

One of the state's greatest accomplishments in the field of industrial waste was removal of acid mine drainage from streams of southwestern Indiana during the past four years. This work was carried on as a Works Progress Administration project under sponsorship of the Indiana State Board of Health and the United States Public Health Service. During the earlier years of the program the Department of Conservation acted as co-sponsor. To date, Mr. Poole said, expenditures amount to about $250,000, and an annual average of about 50,000 tons of sulphuric acid have been removed from the waters of this area.

Phenols have been removed from the wastes of steel mills and oil refineries of Lake county, and this has brought about decided improvement in waters of the area, although pollution in this vicinity still exists.

"Considerable progress has been made in the elimination of pollution caused by cannery waste," Mr. Poole said. "Indiana still has a major cannery waste pollution problem, but this is caused by only 10 per cent of the canneries. Because of the difficulties encountered in obtaining a high degree of treatment at a reasonable cost, most of the progress to date has been brought about by the construction of ponds or lagoons.

"Some progress has been made in the correction of pollution from packing plants, milk plants, and paper mills," he said. "The activated sludge plant of the Kuhner Packing Company, Muncie, is demonstrating that this type of waste can be successfully treated by the activated sludge process, a fact heretofore questioned by many authorities."

Mr. Poole said that some industries have developed recovery processes which have shown a profit in addition to eliminating pollution. Other types of industry have installed elaborate and expensive treatment works. At the present there is no economical means of treatment or practicable means of recovery known for other industrial

wastes. Considering all the factors, it can be estimated that the cost of completing the state's stream pollution abatement program will be between $25,000,000 and $30,000,000, Mr. Poole said.

"In spite of the difficulties encountered with some industrial wastes, the outlook for pollution abatement is good," he said. "Industries are developing a fuller realization of the evils of stream pollution and have assumed a cooperative attitude. In some cases research is in progress, although more research is needed. At the moment, twenty-five municipal projects are in the process of development and if Works Progress Administration or a comparable form of Federal assistance remains, most of them will go under construction in 1940. The completion of these proposed projects will provide treatment for the sewage produced by 220,000 people, thereby raising the percentage of domestic sewage receiving adequate treatment to 84."

Mr. Poole pointed out that "no drastic Legislation and the use of no mailed fist have been necessary to relieve Indiana of 48.5 per cent of her formerly polluted streams."

Indiana is now operating under a law passed in 1933, which empowers the Department of Commerce and Industries to investigate conditions of water pollution and to order their abatement. It requires the adoption of standards of purity and authorizes the adoption of standards for the effluents which are discharged into the watercourses through any sewer or drain. Orders of the State Department of Commerce and Industries must be appealed to a pollution hearing board before coming to the local courts. The law covers all of the waters of the state. Administration of the law is handled by the Division of Stream and Water Pollution, State Department of Commerce and Industries, of which the Indiana State Board of Health is a part. Investigations of stream pollution and the approval of plans and specifications for sewerage works are handled by the Burcau of Sanitary Engineering of the State Board of Health.

TWENTY-FIVE YEARS AGO

Items from THE JOURNAL of June 15, 1915

In the scientific section we find papers by Bernays Kennedy, Indianapolis, on cancer of the uterus; nasal polypi, by G. W. Spohn, Elkhart; trachoma, E. M. Shanklin, Hammond, and treatment of carcinoma, by J. N. McCoy, Vincennes. These papers were discussed in order by Drs. Kelsey, Sterne, Tomlin, Heitger, Stevenson, Bulson, Brose, Hughes, and Simon.

Editorially, the bacterial vaccines and typhoid fever were discussed.

In the editorial notes the attention of the health officers about the state is directed to the need of hyperactivity during the summer months, to the end that there may not be an outbreak of typhoid the following fall.

E. B. Mumford succeeded T. Victor Keene as a member of the Indianapolis City Board of Health.

Dr. E. O. Asher completed his service in the Indianapolis City Dispensary, where he had been in charge of out-patient obstetrics, and had located in New Augusta.

Dr. J. N. Hurty, secretary of the State Board of Health, was named president of the Indianapolis Literary Club.

Dr. John F. Barnhill, now familiarly known as "Uncle Jeff," was appointed head of the Eye, Ear, Nose and Throat department of the Indiana University School of Medicine.

Ira M. Washburn was doing post-graduate work at Rush Medical College, Chicago.

The cornerstone of the new King's Daughters Hospital, at Madison, was laid May 7th.

Dr. O. O. Alexander, Terre Haute, and Miss Anna Marshall of the same city were married April 24th.

POSTGRADUATE COURSE
INDIANA UNIVERSITY SCHOOL OF MEDICINE
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COMPLETE PROGRAM AND INFORMATION—PAGE XI

Registration will be limited to the first twenty applicants

Deaths

J. C. Bucher, M.D., age eighty-six years, for many years a member of the Jasper-Newton County Medical Society, died April 23, 1940, at the home of his daughter in Alpena, Michigan, where he had lived since his retirement from active practice. Dr. Bucher was made an honorary member of the Jasper-Newton County Medical Society in 1933. He graduated from the Medical College of Ohio, at Cincinnati, in 1878, and had practiced in Ohio, Indiana, and Illinois. He practiced last at Wheatfield, Indiana.

George E. Willoughby, M.D., retired physician of Gosport, Indiana, died May eighth, aged seventy-two years. Dr. Willoughby had lived in Gosport since his graduation from the Central College of Physicians and Surgeons, Indianapolis, in 1905.

Frank S. Kitson, M.D., of North Manchester, died April twenty-fifth. Dr. Kitson was sixty-nine years old. He graduated from the University of Chicago, Rush Medical College, in 1895 and had practiced in North Manchester for forty-five years. He was a consistent member of the Wabash County Medical Society, and the Indiana State Medical Association, and was a Fellow of the American Medical Association.

Arthur L. Oilar, M.D., of Russiaville, died April twenty-fifth, aged forty-eight years. Because of impaired health, Dr. Oilar had retired from practice five years ago. He graduated from the Indiana University School of Medicine, Bloomington and Indianapolis, in 1913, and later attended Harvard Medical School and Johns Hopkins University. In World War I, he served as a first lieutenant in the medical corps. For some time he served as public health officer in the State of Maryland; later he held the office of state epidemiologist for Indiana.

Frederick E. Hammond, M.D., of French Lick, died April twenty-third, aged sixty-eight years. Dr. Hammond graduated from the Hospital College of Medicine, Louisville, Kentucky, in 1898.

Monroe T. Koons, M.D., retired physician of Mulberry, Indiana, died May fourteenth, at the home of his daughter. Dr. Koons was ninety-one years old. He received his medical training at the Long Island College of Medicine, Brooklyn, from which he graduated in 1878. Dr. Koons was the father of Dr. Karl M. Koons of Indianapolis.

News Notes

Articles of incorporation for the Monroe County Medical Society have been filed.

Dr. B. P. Gill has moved from Montezuma to Mooresville where he will continue his general practice.

The eleventh scientific meeting of the Association for Research in Ophthalmology will be held in New York at the Biltmore Hotel, June eleventh.

The fifth annual convention of the National Gastroenterological Association will be held at the Hotel Roosevelt in New York, June 4 to 6.

Dr. C. E. Ragan, of Terre Haute, sustained severe injuries when he fell from a cliff near Mudlavia Springs, May sixth.

Dr. A. M. Winklepleck succeeds Dr. Robert Staff as superintendent of the Smith-Esteb Memorial Tuberculosis hospital at Richmond.

Dr. Hugh A. Cowing, of Muncie, has been awarded a twenty-five dollar prize in a national essay contest on the subject of "Life Insurance in Action."

The Indiana Alumni Association of Phi Beta Pi gave a complimentary dinner for the seniors of the active chapter at the U. S. Naval Armory in Indianapolis on May 2, 1940.

Dr. Adolf Meyer, of Baltimore, has been elected president of the National Committee for Mental Hygiene to succeed Dr. Arthur H. Ruggles, of Providence, R. I.

Announcement has been made of the approaching marriage, June sixth, of Miss Marcella Gillum, of Winchester, and Dr. Charles J. Aucreman, Jr., of Montpelier.

Radiologists of eastern Indiana were guests of Dr. Paul Moore at the Hotel Roberts in Muncie, May eleventh. The group holds monthly meetings for the study of advances in radiology.

New officers for the Fort Wayne Academy of Medicine were elected at the annual meeting, May fourteenth. They are: Dr. Juan Rodriguez, president; Dr. H. Vaughn Scott, vice-president; and Dr. William C. Wright, secretary-treasurer.

The twenty-fifth annual meeting of the American Association of Industrial Physicians and Surgeons will be held in New York at the Hotel Pennsylvania, June 6 and 7. Preceding this will be the first annual meeting of the American Industrial Hygiene Association, June 4 and 5.

The Association for the Study of Neoplastic Diseases met at the Brown Hotel in Louisville, Kentucky, April twelfth. Dr. Edwin N. Kime, of Indianapolis, presented a paper on "Mixed Tumor of Parotid Gland with Contralateral and Distant Metastases."

The forty-first annual meeting of the American Proctologic Society will be held in Richmond, Virginia, June 9 to 11, with headquarters at the Jefferson Hotel. At this meeting Dr. A. B. Graham, of Indianapolis, will deliver the biennial Joseph M. Matthews Oration, on "An Appraisal of the American Proctologic Society."

The estate of Dr. Richard B. Wetherill, of Lafayette, has been sued by Dr. Charles J. Brockway, of Brookston, in the amount of $129,240, according to newspaper announcement. Dr. Brockway charges that he served as Dr. Wetherill's physician for twenty-four years and accompanied him on trips to assist in recovering his health.

Dr. and Mrs. B. W. Marshall, of Gary, were honored at a banquet by one hundred friends, neighbors and associates recently on the occasion of Dr. Marshall's retirement from active practice after thirteen years in Gary. Mr. Marshall had practiced for twenty years in the West prior to his work in Gary.

New officers for the Indiana Tuberculosis Association were named at the meeting in Indianapolis, April 17th. Dr. J. V. Pace, of New Albany, was made president; A. W. Mitchell, of LaPorte, first vice-president; Dr. Thomas R. Owens, of Muncie, second vice-president; Dr. E. M. Amos, of Indianapolis, treasurer; Mrs. Thomas C. Scott, of Kokomo, secretary, and Murray A. Auerbach, Indianapolis, executive secretary.

Dr. Brien T. King, of Seattle, Washington, was awarded the Van Meter Prize of $300 by the American Association for the Study of Goiter for his essay on "A New and Function-Restoring Operation for Bilateral Abductor Cord Paralysis." The annual meeting of the association, where the award was made, was held at Rochester, Minnesota, in April.

The members of the American Society of Clinical Pathologists will hold their nineteenth annual meeting and seventh seminar at the Hotel Biltmore in New York, June 7 to 9.

The forty-sixth annual meeting of the American Laryngological, Rhinological, and Otological Society will be held at the Hotel Waldorf-Astoria, New York, June 6 to 8.

The ninety-sixth annual meeting of the American Psychiatric Association will be held at the Netherland Plaza Hotel in Cincinnati, Ohio, May 20 to 24. Dr. William C. Sandy, of Harrisburg, Pennsylvania, is president. The American Psychopathological Association will meet at the Hotel Netherland Plaza, May 18 and 19, and the American Psychoanalytic Association will hold its meeting May 19 and 22 at the same place.

The twenty-first annual conference of the Indiana Society for Mental Hygiene was held at the Claypool Hotel, Indianapolis, May 17 and 18. Speakers included Dr. Herman B Wells, president of Indiana University, Dr. Robert Haskell, medical superintendent of Wayne County Training School, Northville, Michigan; Dr. Franz Alexander, Chicago; Dr. Samuel W. Hamilton, of the United States Public Health Service; and Dr. David Slight, professor of psychiatry, University of Chicago. Mr. Donald DuShane, as president of the society, opened the meetings. Various Indiana members participated in the program.

Official opening of a new medical library contributed to the Indianapolis City Hospital by Eli Lilly & Company was a feature of the hospital's celebration of National Hospital Day which was observed on Monday, May thirteenth, instead of the usual date May twelfth. The library was opened following a luncheon meeting at which Mayor Reginald H. Sullivan and Dr. William N. Wishard were guests of honor. Dr. Wishard presented to the library "The Autobiography of Dr. Harvey Wiley." Eli Lilly & Company has made available approximately $8,000 for the establishment of the library.

REGISTRATION UNDER HARRISON NARCOTIC ACT REQUIRED BY JULY FIRST

Every physician registered under the Harrison Narcotic Act or under the Marihuana Tax Act, or under both, must reregister on or before July 1, 1940, with the collector of internal revenue of the district in which he maintains an office. Failure to reregister by that time adds a penalty of twenty-five per cent to the tax payable at time of registration and makes the defaulting physician liable to a fine not exceeding $2,000 or to imprisonment for not exceeding five years, or both.

Plans for a Pan-American congress on Ophthalmology to be held at the Hotel Cleveland, Cleveland, Ohio, October 11 and 12, 1940, have been announced. The congress will be sponsored by the American Academy of Ophthalmology and Otolaryngology which will hold its annual convention immediately preceding the Pan-American gathering. Governments of all the countries of the Western Hemisphere have been invited to send official delegates. The congress will be open to any ophthalmologist who wishes to register and is not limited to members of the Academy. Further information may be obtained from the American Academy of Ophthalmology and Otolaryngology, 1500 Medical Arts Building, Omaha, Nebraska.

The Indiana Bone and Joint Club held its spring meeting at the Indianapolis Athletic Club on the afternoon and evening of April 24, 1940. The program consisted of a discussion on the subject of "Unusual Fractures" under the chairmanship of Dr. E. H. Clauser, of Muncie, in the afternoon and a similar discussion of the subject of "Knee-Joint Fractures" in the evening under the chairmanship of Dr. Fred Wishard of Anderson. At a business meeting the following officers for the coming year were elected: Gordon W. Batman, M. D., Indianapolis, president; August F. Knoefel, M. D., Terre Haute, vice-president; and Charles F. Thompson, M. D., Indianapolis, secretary-treasurer.

For the academic year 1940-41, Abbott Laboratories has established fellowships in several universities with important departments of organic chemistry and biochemistry. The fellowships, carrying stipends of $650 per year, will be available to graduate students in the last or next to last years of graduate work leading to the doctorate degree. The recipients, who are to be selected by the universities in which their work is being done, are not limited as to the subjects on which they will work. The object of the fellowships is to provide means for the carrying on of additional scientific work in American universities. The future progress of chemical developments in this country will depend upon the availability of well-trained and qualified men. Grants will be made to the following universities:

In organic chemistry: Cornell, Harvard, Illinois, Michigan. In biochemistry: California, Columbia, Cornell.

The nineteenth annual scientific and clinical session of the American Congress of Physical Therapy will be held September 2 to 6, 1940, at the Hotel Statler, Cleveland, Ohio. The mornings will be devoted to instruction courses enabling attendance at both the course and scientific sessions which will be given in the afternoons and evenings. The seminar and convention proper will be open to physicians and qualified technicians. While every phase of physical therapy will be covered in the general program, special emphasis will be laid on the use of physical measures in general practice. Symposia dealing with light, heat and electricity as important therapeutic adjuvants in general medical and surgical practice will be presented. Complete information may be obtained from the American Congress of Physical Therapy, 30 North Michigan Avenue, Chicago.

The sixteenth scientific session of the American Heart Association will be held June 7 and 8 at the Hotel Roosevelt in New York City. The program of the Section for the Study of the Peripheral Circulation on Saturday, June 8, includes a paper on "Production of Renin by Constricting the Renal Artery of an Isolated Kidney Perfused with Blood," by Drs. K. G. Kohlstaedt and Irvine H. Page of Indianapolis.

Each year the Travelers Insurance Company publishes a little book on traffic accidents. This year it is appropriately titled "Smash Hits," and calls attention to the fact that many of the most dramatic smash hits of 1939 were not seen on stage or screen but on the highways. The booklet tells the facts about accidents in which 32,100 persons were killed and almost a million and a quarter others were injured last year. A few highlights from the official records as presented in the booklet are these interesting facts:

Exceeding the speed limit was responsible for 36.5 per cent of the fatalities and 22.5 per cent of the injuries in 1939.

Nearly 40 per cent of all traffic accident victims were pedestrians.

Almost 87 per cent of fatal accidents occurred in clear weather, and almost 80 per cent happened when the road surface was dry.

More than 93 per cent of the drivers involved in fatal accidents were male and less than seven per cent female.

More persons were killed on Sunday than on any other day of the week; the heaviest injury toll came on Saturday. Wednesday was the safest day for travel. The period between 7 p. m. and 8 p. m. was the most dangerous hour of the day.

Dedication of Osler Memorial to be held at Blockley

The old autopsy house where Osler worked at Blockley has been restored as the Osler Memorial Building, and will be dedicated on the grounds of the Philadelphia General Hospital, at Curie Avenue, near 34th and Pine Streets, Philadelphia, Pa., at 2 P. M. on June 8, 1940. Original furnishings, including the necropsy table, have been collected. The painting by Dean Cornwell, N.A., of New

York, entitled "Osler at old Blockley," later to be hung in the building, will be on exhibition during the celebration. There are facilities in the building for the housing and preservation of relics of old Blockley, as well as Osleriana. The Committee would welcome any additions to this collection. A cordial invitation is extended to those who are interested, and especially those who are planning to attend the American Medical Association Convention in New York City June 10th to 14th.

DEDICATION OF JANE TODD CRAWFORD MEMORIAL

A luncheon was served to 110 guests at the Davis Hotel in Sullivan, May 11, 1940; these guests had met to participate in the program of dedication of a memorial to Jane Todd Crawford.



An event of historic interest to all physicians, the dedication occurred at the tomb of Mrs. Crawford in Johnson cemetery near Sullivan. A monument given by the Indiana Hospital Association was unveiled by Dr. M. M. McDowell, of Freelandville, a great-great-grand-nephew of Dr. Ephraim McDowell who performed on Mrs. Crawford the first ovariotomy. Speakers included Dr. A. M. Miller, of Danville, Ill., Father John A. Bankowski, of Sullivan, Miss Nellie G. Brown, of Muncie, president of the Indiana Hospital Association; Dr. W. N. Thompson, of Sullivan, and Mrs. Hazel Millard, superintendent of Mary Sherman Hospital in Sullivan.

The dedicatory program was planned by Mr. Albert G. Hahn, executive secretary of the Indiana Hospital Association. Photographs were taken and may be obtained from the Mary Sherman Hospital of Sullivan.

Mrs. A. T. McCormack, of Louisville, attended the ceremonies and told of the Jane Todd Crawford Trail in Kentucky—the sixty miles that the heroine rode on horseback to the home of Dr. McDowell in Danville, Ky. The Woman's Auxiliary to the Kentucky Medical Association is sponsoring this movement and plans to have the road widened and flowers planted on each side. Flower seeds already have been sent by women all over America.

Mrs. O. G. Pfaff, of Indianapolis, represented the Woman's Auxiliary of the Indiana State Medical Association. Mrs. Pfaff is chairman of the Pioneer Memorial Committee.

Dr. A. M. Mitchell, of Terre Haute, attended as the representative of the Indiana State Medical Association.

The monument is approximately six feet high and is of gray marble, with the story of Mrs. Crawford carved on the front.

POSTGRADUATE COURSE IN OBSTETRICS TO BE GIVEN IN ST. JOSEPH COUNTY IN JUNE

June 3, 4, and 5 are the dates for the three-day intensive postgraduate course in obstetrics for the St. Joseph County Medical Society. This course is sponsored by the local medical society in cooperation with the Bureau of Maternal and Child-Health of the Indiana State Board of Health, and will be conducted by Carl P. Huber, M. D., resident adviser and research director in obstetrics and gynecology of Indiana University School of Medicine, and Director of Postgraduate Education in Obstetrics of the Indiana State Board of Health. The meeting will be held in South Bend.

The program follows:

First Meeting—June 3—Monday (Epworth Hospital)

4:00- 6:00 P.M.
1. Antenatal Care
2. The Management of Labor
3. Asphyxia Neonatorum (With motion pictures)

7:00-10:00 P.M.
1. Abortion and Ectopic Pregnancy
2. Postpartum Hemorrhage (With motion pictures)
3. Placenta Previa and Abruptio Placenta

Second Meeting—June 4—Tuesday (St. Joseph Hospital)

4:00- 6:00 P.M.
1. The Medical Complications of Pregnancy
2. Breech Presentation (With motion pictures)

7:00-10:00 P.M.
1. Indications for the Use of Forceps
2. Forceps (With motion pictures)
3. Posterior Positions

Third Meeting—June 5—Wednesday (St. Joseph Hospital)

4:00- 6:00 P.M.
1. The Toxemias of Pregnancy
2. Eclampsia (With motion pictures)

7:00-10:00 P.M.
1. Cesarean Section
2. The Low Cervical Cesarean (With motion pictures)
3. Puerperal Infection

INDIANA UNIVERSITY NEWS

ANNUAL POSTGRADUATE MEETING

Approximately 500 Indiana physicians attended the annual postgraduate course in general medicine and surgery conducted May 6-11 at the Indiana University School of Medicine. Five nationally known physicians and laymen addressed the night sessions.

Paul Harrison, widely known medical missionary who has spent a number of years in Arabia and now is on leave of absence, residing in Kalamazoo, Mich.; Dr. Roy McClure, surgeon, and Dr. F. M. Hartman, pathologist, both of Detroit; Dr. W. D. Stroud, Philadelphia, Pa.; Dr. Edward L. Compere, orthopedic surgeon, Chicago, and Dr. Bryng Bryngelson, Ph.D., Minneapolis, Minn., were the speakers for the evening meetings.

Clinics, lectures and demonstrations were held throughout each of the five days, starting at 8:30 o'clock in the morning. Clinics were held in medicine, rectal diseases, obstetrics, heart disease, gynecology, general surgery, eye disorders, pediatrics, ear, nose and throat disease, genitourinary subjects, orthopedics and dermatology.

An outstanding feature of the program was a round table discussion on premature and newborn infants. Discussions were led by Dr. Stanley Gibson of Chicago and Dr. A. B. Schwartz of Milwaukee, Wis.

The postgraduate course was started several years ago to enable physicians throughout the state to hear outstanding discussions bringing out latest developments and findings in medicine and surgery.

Dr. W. D. Gatch, dean of the Indiana University School of Medicine, presided at all of the evening sessions. Dr. C. J. Clark was chairman of the school's committee on postgraduate education.

DR. B. D. MYERS TO RETIRE

After 37 years of teaching and administrative services at Indiana University, Dr. B. D. Myers, dean of the Indiana University School of Medicine at Bloomington, will retire at the end of the present semester. Having reached the age of 70, he will be retired under the university's regular retirement plan.

The following part-time members of the medical and dental faculty of the university also will retire this year: Dr. Alois B. Graham, chairman of the division of gastro-enterology and professor of surgery; Dr. Charles E. Cottingham, associate in neurology and psychiatry; Dr. John Tipton Wheeler, professor of anatomy, school of dentistry, and Dr. Louis DeKeyser Belden, associate professor of pathology, bacteriology and histology, school of dentistry.

Dean Myers began his educational career as superintendent of the Greenwich, Ohio, schools in 1893, joined the Cornell faculty as assistant in physiology in 1898, was assistant in anatomy at Johns Hopkins in 1902 and 1903, and became professor of anatomy at Indiana University in 1903. He was made assistant dean of the school of medicine at Bloomington in 1920 and dean in 1927.

THE REGISTRY FOR CLINICAL LABORATORY TECHNICIANS

At the request of Dr. B. W. Rhamy, state counsellor for the American Society of Clinical Pathologists, the following editorial is reprinted from The Journal of the A. M. A., Volume 114, Number 13, March 30, 1940:

In 1928 the American Society of Clinical Pathologists established a Registry to pass on the qualifications of laboratory technicians and to approve schools for training these workers. Soon this registry received the recognition of the American Medical Association, the American College of Surgeons, the American Hospital Association, the Catholic Hospital Association and other scientific and medical organizations. The Council on Medical Education and Hospitals was authorized to formulate standards and approve schools which meet its requirements. After a thorough test, conducted by clinical pathologists, successful applicants for a certificate were designated as Medical Technologists (M.T.), a title which connoted a holder of a certificate of competence from the registry, nationally recognized in the medical and hospital spheres. Within the past six months one C. A. Bartholomew of Red Bank, N. J., who has never himself been registered, began to circularize the medical laboratory technicians of New England asking them for a fee of $5 to join the "American Medical Technologists" and offering to bestow the title M. T. by virtue of a charter from the State of New Jersey. As far as we know, this movement is not supported or authorized by any scientific body. The promoters seem, moreover, to have undertaken the task of passing on the competence of training schools for medical technologists. In this they seem to be abetted by the proprietors of some commercial schools which have not themselves been approved by the Council on Medical Education and Hospitals and the Registry. This would seem to be the old technic of having one soiled hand wash the other. Graduates from these unapproved schools who are ineligible for the Registry's examination seem to be welcomed into the "American Medical Technologists." Indeed, a teacher of one of these schools has, it is reported, solicited its graduates to join this organization at reduced rates. Complaints have come to both the Council and the Registry against the efforts of this unauthorized and irresponsible body to undermine the scientific and ethical standards that have been set up for the practice of this important vocation by the American Medical Association and the American Society of Clinical Pathologists. Certainly physicians everywhere will do their utmost to inform young men and women who contemplate a career in medical technology of the hazard that lies in participation in such courses or organizations.

BOOKS

MINOR SURGERY. By Frederick Christopher, S.B., M.D., F.A.C.S., associate professor of surgery at the Northwestern University Medical School, Chicago. Foreword by Allen B. Kanavel, M.D., F.A.C.S. Fourth edition, reset. 990 pages with 639 illustrations. Cloth. W. B. Saunders Company, Philadelphia and London, 1940.

INTRODUCTION TO MEDICINE. By Don C. Sutton, M.S., M.D., Associate Professor of Medicine, Northwestern University School of Medicine. Introduction by Ada Belle McCleery, R.N., Superintendent, Evanston Hospital. 642 pages with 144 text illustrations and 14 color plates. C. V. Mosby Company, St. Louis, 1940. Cloth. Price, $3.25.

CHEMOTHERAPY AND SERUM THERAPY OF PNEUMONIA. By Frederick T. Lord, M.D., clinical professor of medicine, emeritus, Harvard Medical School; Elliott S. Robinson, M.D., Ph.D., Director, Division of Biologic Laboratories, Massachusetts Department of Public Health; and Roderick Heffron, M.D., medical associate, the Commonwealth Fund; formerly field director, Pneumonia Study and Service, Massachusetts Department of Public Health. 174 pages. Cloth. Price, $1.00. The Commonwealth Fund, New York, 1940.

POPULATION, RACE AND EUGENICS. By Morris Siegel, M.D. 206 pages. Cloth. Price $3.00. Printed in Canada, published by the author, East Hamilton, Ontario, 1939. Copyright, Canada, 1939.

SOCIETIES AND INSTITUTIONS

INDIANA STATE MEDICAL ASSOCIATION

THE EXECUTIVE COMMITTEE

April 28, 1940.

Roll call showed the following present: C. A. Nafe, M.D., chairman; C. H. McCaskey, M.D.; K. R. Ruddell, M.D.; A. M. Mitchell, M.D.; M. A. Austin, M.D.; A. F. Weyerbacher, M.D.; Albert Stump, attorney, and T. A. Hendricks, executive secretary.

The following committees of the state association were holding meetings at the same time as the Executive Committee: Committee on Conservation of Vision; Liaison Committee with Indiana State Department of Public Welfare, and the Council.

Membership Report:

Number of members April 26, 1940	2,998
Number of members April 26, 1939 (90 hon. mems.)	2,946
Gain over last year	52
Number of members Dec. 31, 1939	3,145

The Statement of Receipts and Expenditures for March for the Association committees was approved.

1940 Annual Session at French Lick

Commercial exhibit. 25 spaces sold; 9 to be sold.

Scientific program. All places are filled on the general program and the section programs will be completed in June.

National Physicians' Committee. The committee officially approved the selection of Dr. Irvin Abell of Louisville to speak ten minutes before the House of Delegates upon the National Physicians' Committee. Dr. Karl Ruddell was authorized to write Dr. Abell inviting him to fill this place on the program on behalf of the National Physicians' Committee.

Legislative, Legal and Social Security Matters

National

Word received that suggestions for amendment to the original bill proposed by the representatives of the American Medical Association and the National Hospital Association are included in the revised Wagner-George hospital bill.

Letter received from Raymond S. Springer, a member of the House committee to which H. R. 8963, recognizing chiropractic, introduced by Representative Tolan of California, was referred. Mr. Springer stated that he is "in full accord with your good thought respecting this proposed legislation." This letter was written to Dr. Edgar C. Denny of Milton, Indiana, by Mr. Springer.

No new developments in the decision of the United States Court of Appeals in regard to the A. M. A. case.

Albert Stump is to answer further a letter in regard to the standing of any county society which might join the A. F. of L. The committee felt that it might be well to write to Dr. George E. Follansbee, chairman of the Judicial Council of the A.M.A. for an opinion.

Local

May primaries. Letters have been sent by the legislative committee to county societies concerning May primaries.

Report of Dr. Norman Beatty in regard to the meetings being held by the Indiana Inter-Professional Health Council concerning the drafting of a barbiturate bill brought to the attention of the committee.

Organization Matters

Bulletin received from the American Medical Association in regard to the Internal Revenue Department ruling concerning organizations such as the Indiana State Medical Association and their liability for income and social security taxes. This material was referred to Albert Stump, who is to report back at the next meeting of the committee.

Resolution passed by the Clay County Medical Society against its members consulting with irregular practitioners brought to the attention of the committee.

Information from the West Virginia State Medical Society concerning automobile emblems which are distributed by the society brought to the attention of the committee. The committee felt that the Indiana physicians would not be interested in obtaining these emblems through the state association as, if they desire them, they can be obtained through the American Medical Association.

State Board of Health

Letter received telling of the "short cut" method which is used to obtain marriage licenses in Lake county. The committee felt that as there is no violation of the law nothing can be done in regard to this. The letter was turned over to Dr. Austin to answer.

Group Hospitalization

Attention of the members of the committee called to the president's page that will appear in the May JOURNAL concerning the effect which nonprofit hospital insurance may have upon voluntary hospitals.

Article which appeared in the Indianapolis *Star* concerning the formation of a new group hospitalization company under the fraternal insurance clause of the 1935 state insurance act brought to the attention of the committee. No member of the committee had any knowledge of this organization. The committee asked that information concerning this plan be obtained for the next meeting of the committee.

Postgraduate and Future Medical Meetings

Indiana University course to be held May 6 to 11, 1940.

District society meetings:

Fourth District—May 8, 1940, Seymour
Fifth District—May 10, 1940, Terre Haute
Sixth District—May 15, 1940, Brookville (Ruddell)
Eleventh District—May 15, 1940, Huntington (Mitchell)
Ninth District—May 16, 1940, Attica
First District—May 23, 1940, Evansville (Ruddell)
Tenth District—May 23, 1940, Hammond (Mitchell)
Third District—May —, 1940, New Albany
Second District—June 6, 1940, Sullivan
Eighth District—June 19, 1940, Elwood

Letter from Dr. W. U. Kennedy commending Dr. Howard Mettel for his help in arranging the program for the Sixth District meeting brought to the attention of the committee.

American Medical Association meeting at New York June 10 to 14. House of Delegates convenes Monday, June 10.

a. *No special train.* The committee voted against a special train but instructed the secretary to supply the railroads with mailing lists of members so that the members might be circularized in regard to accommodations to New York.

Farm Security Administration

Mr. Victor H. Davison, State Community and Cooperative Specialist of the Farm Security Administration, appeared before the Executive Committee and stated that one county in the state was to be selected for a physical examination survey upon the Farm Security clients. Funds are available to pay the physicians who make these examinations. The Executive Committee endorsed the plan in principle and recommended that the Farm Security Administration make its arrangements through one of the local county medical societies in Indiana to do the examining. The committee particularly recommended that the work be done by local physicians and not by outside physicians brought in to the local society by the State Board of Health or the medical school. The Executive Committee did not see any harm in having the State Board of Health supply nurses if the local society desired nurses to be supplied as aids.

Medical Economics

Report made upon the round table discussion of the Governor's Advisory Health Council in regard to "The Functions and Duties of a Medical Social Worker in the Medical Care Program." Members of the committee felt that the social workers who attended the discussion brought out one very good point when they said they hoped that the medical profession was attempting to understand the attitude of the social workers just as the social workers are attempting to understand the viewpoint and problems of the medical profession.

Complaint against Mayo Clinic publicity. The committee approved the action taken by the Oregon State Medical Society against publicity of the Mayo Clinic which appeared in a recent issue of *Life* magazine and also the Mayo Foundation's exhibit at the San Francisco fair.

It would appear that this exhibit (of the Mayo Clinic Foundation) shown at the San Francisco fair, while ostensibly of a scientific character, is presented in such form as to make it a means of attracting patronage and hence it is commercial in nature.

The article in *Life* is devoted to statements to the effect that there are 500 doctors on the staff, that as many as 1,000 patients register in a day, and that approximately 17,000 operations are performed each year. The obvious effect of such publicity in a lay publication is to attract patients.

(Since this letter was received and considered by the Executive Committee, word has come that the Minnesota State Medical Association appointed a special committee to investigate these complaints and they have exonerated the Mayo Clinic of inciting this publicity. Word has also come from Oregon completely retracting their original complaints and charges.)

Sickness Insurance and Socialized Medicine

Letter from Dr. B. D. Myers, dean of the Indiana University School of Medicine at Bloomington, stating that a member of the medical department staff desired to have the up-to-date attitude of the Indiana State Medical Association regarding socialized medicine brought to the attention of the committee. The committee approved the answer to Dr. Myers' letter enclosing the new eight-point program of the American Medical Association and stating that the Indiana State Medical Association had approved this program.

The committee expressed its approval of those

releases published by the Marshall County Medical Society in its local paper which have come to the attention of the committee.

U. S. Pharmacopoeial Convention in Washington, May, 1940

Dr. W. B. Challman of Mount Vernon and Dr. Samuel Kennedy of Shelbyville have been assigned to attend this meeting as representatives of the state medical association.

State Board of Medical Registration and Examination and Cult Study Committee

Letter in regard to the activities of a cultist at Hillsboro, Indiana, brought to the attention of the committee. This matter has been referred to the Committee to Study Cultists and Irregular Practitioners.

"Indiana Plan"

The committee was previously informed by letter of attack on the "Indiana Plan" by the National Health Foundation. Information in regard to the National Health Foundation obtained and sent to Milt D. Campbell, assistant to the director of the National Child Welfare Division of the American Legion.

Business and Consumer Relations Conference

Invitation received to attend conference which is to be held at Bloomington on June 18. The committee felt that it would be well to be represented at this conference.

Article in Regard to Too Many Hospital Beds

An article prepared by Dr. Samuel Kennedy of Shelbyville maintaining that there are already too many vacant hospital beds and that a government program for hospital construction is not necessary brought to the attention of the committee. The committee felt that in some respects the conclusions reached by Dr. Kennedy were correct but that in certain localities a shortage in hospital beds exists.

Crippled Children Program

Information placed before the committee that a cardiac program, to be conducted by the Crippled Children Division of the State Department of Public Welfare, was at one time contemplated here in Indiana. It is understood that nothing is to be done with this program in this state.

State Conference of Social Workers

Topic to be discussed in Division VI at the fall meeting of the conference will be "Full-Time Local Public Health Departments in Indiana."

Resolution of Conservation of Vision Committee

Dr. E. E. Holland, chairman of the Committee on Conservation of Vision, appeared before the Executive Committee and outlined the resolution for the creation of an A.M.A. Committee on Conservation of Vision. This resolution is to be placed before the A.M.A. House of Delegates at the New York meeting through the Section on Ophthalmology of the A.M.A. Copies of the resolution are to be sent to each state medical society and to the Indiana delegates to the A.M.A. so that if the resolution passes the section and is presented to the House of Delegates, the delegates will have some information in regard to its aims and purposes.

The Journal

Report made on advertising.

Committee informed that the Editorial Board is to have a meeting some time in May.

THE BUREAU OF PUBLICITY

March 20, 1940

Present: W. N. Wishard, M.D., chairman; C. F. Thompson, M.D., and T. A. Hendricks, executive secretary.

The following schedule for a series of releases on heart disease was approved for publication by the bureau:

(1) Introductory article, "Heart Disease—Killer Number One," for release Saturday, March 30.

(2) "General Aspects of Heart Disease," for release Saturday, April 6.

(3) "Heart Diseases in Children," for release Saturday, April 13.

(4) "The Failing Heart of Middle Life," for release Saturday, April 20.

(5) "Acute Heart Attacks," for release Saturday, April 27.

At the request of the bureau this series was outlined as a result of a conference of a group of physicians who specialize in heart disease.

Newspaper releases prepared by the Marshall County Medical Society were brought to the attention of the bureau. The bureau feels that the Marshall County Medical Society should be congratulated upon this undertaking.

The bureau was informed that the Executive Committee has been sent a copy of the opinion of the bureau in regard to the suggestions made by the Executive Committee that lay speakers be appointed by the state association to talk on socialized medicine. The report of the Bureau of Publicity will be brought formally to the attention of the Executive Committee at its next meeting.

One member of the bureau presented a suggestion to the bureau for the extension of the "Indiana Plan" of preventive medicine.

The pamphlet entitled "Information Regarding the Prevention of Contagious Diseases," which was printed several years ago by the Bureau of Publicity, was presented to a member of the Indiana Pediatric Society for changes which he might recommend before the pamphlet is reprinted. These have been received from this member and the bureau now recommends that the

suggested changes be sent to the officers of the pediatric society for their suggestions and comments.

At the last meeting of the bureau one member was asked to prepare and present to the bureau an outline of the actions taken by the Bureau of Publicity and the Executive Committee in regard to a certain post-graduate course conducted in Indiana without the sponsorship of any authorized medical group. The member of the bureau outlined the occurrences in regard to the postgraduate course.

The Bureau felt that an expression should be obtained from the Indiana Academy of Ophthalmology and Otolaryngology and from the Committee on Conservation of Vision of the Indiana State Medical Association on the following question: "How may the need of postgraduate work in optics and refraction for the general Indiana practitioner be best carried out and fulfilled?"

The Bureau of Publicity discussed the fact that in campaigns for the laity against syphilis, tuberculosis, cancer, etc., the fear complex is stressed too often. The Bureau feels that care should be taken not to throw the public into a panic about cancer, syphilis, heart disease, etc., and that no campaign would be better than a campaign which would mislead the public and result in a fear complex. The bureau suggested that a statement be prepared and presented at the next meeting of the bureau voicing a warning in regard to such fear complex.

ELEVENTH DISTRICT MEETING

The sixty-third semi-annual meeting of the Eleventh Indiana Councilor District Medical Association was held at Huntington, May fifteenth, with headquarters at the Lafontaine Hotel.

A clinic was held in the forenoon with Dr. Samuel M. Feinberg, of Chicago, as guest speaker. He presented and discussed a number of cases of contact dermatitis of allergic origin.

The afternoon session was preceded by a business meeting. Addresses were presented by Dr. Eva M. Kennedy (presidential address); Dr. Samuel Feinberg, whose subject was "Allergic Diseases in the Summer"; Drs. Earl B. Jewell and W. E. Barnett of Logansport who talked on "Anemias: Mode of Origin, Diagnosis and Treatment"; H. L. Egbert, M.D., of Indianapolis, whose topic was "Varicose Veins," and a talk by a representative of the Indiana State Medical Association.

The usual banquet was served in the evening, following which "Dusty" Miller of Wilmington, Ohio, was the guest speaker. Music was supplied by the Lafontaine String Ensemble.

During the business session, officers were elected as follows:

President, C. R. Herd, M.D., Peru.
Secretary-treasurer, O. G. Brubaker, M.D., North Manchester.

Upon invitation of the Wabash County Medical Society and the dean of Manchester College, it was decided to hold the next meeting on the campus of Manchester College, some time in October of 1940.

Guests at the meeting included Dr. Karl R. Ruddell, Indianapolis; Dr. A. M. Mitchell, Terre Haute; Dr. M. A. Austin, Anderson; and Mr. Thomas A. Hendricks, Indianapolis.

O. G. BRUBAKER, M.D., *Secretary*

NINTH DISTRICT

At the meeting of the Ninth District Medical Society held at the Mudlavia Springs Hotel, May 16, 1940, the following officers were elected:

President, S. B. Sims, M.D., Frankfort.
Vice-president, J. A. Van Kirk, M.D., Frankfort.
Secretary-treasurer, F. A. Beardsley, M.D., Frankfort.

Dr. Floyd T. Romberger, of Lafayette, was elected to succeed himself as councilor for the district. Frankfort was selected as the meeting place and the next meeting date was set for May 22, 1941.

FOURTH DISTRICT

At the meeting of the Fourth District Medical Society in Seymour, May eighth, the following officers were elected:

President, George S. Row, M.D., Osgood.
Vice-president, O. H. Stewart, M.D., Aurora.
Secretary-treasurer, J. T. Carney, M. D., Batesville.

The 1941 meeting will be held next May at Batesville.

UNION DISTRICT MEDICAL ASSOCIATION

The one hundred forty-fourth semi-annual meeting of the Union District Medical Association was held Thursday, April twenty-fifth, at the Lutheran Church in New Castle. The meeting was called to order at ten o'clock in the morning. Dr. M. A. Austin of Anderson talked on "Organized Medicine." Dr. Archie Fine of Cincinnati, Ohio, talked on "The Treatment of Advanced Cancer." This included a discussion of the use of low temperatures from experience at the Jewish Hospital in Cincinnati, and the talk was illustrated with lantern slides.

At 12:30 p.m. a chicken dinner was served. In the afternoon Dr. A. K. Harcourt of Indianapolis presented a paper on "The Injection Treatment of Hernia," and Dr. Howard B. Mettel, chief of the Bureau of Maternal and Child Health of the Indiana State Board of Health, talked on "The Relationship of Medical Practice to Existing Federal and State Legislation."

WOMAN'S AUXILIARY

President—Mrs. W. E. Tinney, Indianapolis.
President-elect—Mrs. C. R. Bock, Muncie.
Corresponding Secretary—Mrs. Byron Rust, Indianapolis.
Treasurer—Mrs. C. V. Rozelle, Anderson.

The organization of two new county auxiliaries was reported for May, making a total of fifteen new auxiliaries. The latest are Porter and Elkhart counties. Congratulations to them!

About 850 copies of the *Hoosier News Letter* of the State Auxiliary were mailed to paid auxiliary members in May telling of the welcome and program awaiting Indiana members at the National Convention to be held in New York City, June 10-14.

Mrs. O. G. Pfaff, Chairman of the Pioneer Memorial Committee of the State Auxiliary represented the auxiliary, May eleventh, at the dedication ceremony of a monument to Jane Todd Crawford, at the old Johnston Cemetery near Sullivan, Indiana. An account of this meeting is published elsewhere in this JOURNAL.

MRS. CLIFFORD TAYLOR, Chairman,
Press and Publicity

VIGO COUNTY AUXILIARY

Officers 1939-1940

President.....Mrs. W. C. McCormick
Vice-President.....Mrs. Floyd Riggs
2nd Vice-President.....Mrs. John Haslem
Secretary.....Mrs. George Carpenter
Treasurer.....Mrs. James McEwen
Publicity Chairman.....Mrs. C. N. Combs



Mrs. McCormick

The Vigo County Auxiliary organized in 1929 for social meetings has grown to a membership of seventy-eight supporting one of the most worthwhile projects in the state: occupational therapy work in the two Terre Haute hospitals. In the years preceding this endeavor the members grew to know each other better and formed many lasting friendships. This project, which is in its second year, consists of payment of a teacher, Miss Ruth Watts, a graduate of Indiana State Teacher's College in Terre Haute, who teaches occupational therapy at both St. Anthony's and Union Hospitals twice a week for two hours each time. The materials are also financed by the auxiliary.

Miss Watts, herself a cripple requiring the aid of crutches, started her work with the children, but as the demand for adult instruction grew, the work was extended and has included children of four years and adults of seventy years. In April, 1940, she taught 105 patients, all of whom look forward eagerly to the visits of this teacher with the lovely personality. Miss Watts teaches basket-weaving, leather work, crocheting, and needlework. One little girl made souvenirs such as footballs, basketballs, drums, etc., which were sold for her by the Blue Triangle girls at football and basketball games and netted her $5 for Christmas money.

The auxiliary has financed the work until recently by money made from one large annual bridge party, and the amount remaining from the two-dollar membership dues after other expenses were deducted.

A Ways and Means Committee appointed in March organized the group into eight sections, each to raise $25 by fall. At present half of the money has been raised and turned into the treasury, such is the enthusiastic response to this work. In time it is hoped to sell some of the articles to defray expenses. Miss Watts and Mrs. C. N. Combs, publicity chairman of the auxiliary, are preparing an exhibit which Mrs. Combs expects to take to New York to the A. M. A. meeting.

Outside of this project, the auxiliary has had several very interesting meetings; the first was held last October at which Mrs. J. R. Yung, a member, spoke on "Four Weeks in Mexico." Mrs. Yung is an outstanding artist and has exhibited paintings in the Hoosier Salon. In January a dinner was held for members and guests at the Terre Haute House ballroom. Miss Charlotte Lee, dramatic instructor at St. Mary's of the Woods, gave a reading of "No Time for Comedy" in which Katherine Cornell had starred. In March the program consisted of a reading by a member, Mrs. T. W. Moorehead, of Henry Wolfram's "The Excursion." In May a picnic luncheon was held at the country home of Mrs. A. Utterback. Mrs. W. E. Tinney, State President, and Mrs. W. F. Hughes of Indianapolis were guests. Mrs. Tinney gave an informative talk. Also throughout the year time has been given to discussion of bills pending in the legislature.

Members hold offices in the League of Women Voters, the Children's Theatre, D. A. R., and the Woman's Department Club. Mrs. Maurice Van Cleave holds an office in the National Auxiliary.

A LAST REMINDER to make your reservation for the 18th Annual Convention of the Woman's Auxiliary to the American Medical Association to be held at the Hotel Pennsylvania, New York City, June 10 to 14, 1940. New York has much to offer aside from the convention and we are sure you will not want to miss the opportunity of visiting New York this year.

LOCAL SOCIETY REPORTS

Adams County Medical Society members and their wives, composing the newly organized auxiliary, held a banquet and meeting at the Zion's Reformed Church in Decatur, April sixteenth. Dr. Lyman T. Rawles of Fort Wayne was the guest speaker.

* * *

Carroll County Medical Society held a meeting at Camden, May tenth. Dr. O. L. Siewert of Logansport was guest speaker of the evening. His subject was "The Eye in General Practice."

* * *

Clinton County Medical Society met at the Clinton County Hospital in Frankfort, May seventh. Dr. C. A. Robison, of Frankfort, spoke on "Medical Aspects of Insurance." Twelve members were present.

* * *

Dearborn-Ohio County Medical Society and dentists in the county met at Lawrenceburg, May second, for a dinner meeting. Dr. Willian M. Doughty, of Cincinnati, Ohio, spoke on "Fractures of the Jaws." Twenty members were present.

* * *

Decatur County Medical Society held a meeting at Greensburg, March twenty-seventh, with eight members in attendance.

* * *

Delaware-Blackford County Medical Society met at the Hotel Roberts in Muncie, April seventeenth. A paper on "Roentgenology in Non-Malignant Diseases in General Practice" was presented by Dr. Bruce Stocking and Dr. P. D. Moore, both of Muncie. Thirty-one members were present.

* * *

Elkhart County Medical Society members held a dinner meeting at the Hotel Elkhart, May second. They heard an address on "Medical Economics" by Dr. R. L. Sensenich of South Bend. It was the scciety's last meeting until September.

* * *

Fort Wayne (Allen County) Medical Society met at the Indiana Hotel, Fort Wayne, April sixteenth. Dr. A. M. Snell, M.D., of the Mayo Clinic, Rochester, Minnesota, was the guest speaker. His topic was "Problems Presented by the Jaundiced Patient." Seventy-five members were present.

On April twenty-third, members met at the Chamber of Commerce Building. Pharmacists B. T. Kearns and H. H. Meinzen gave a demonstration and discussion of the "Official Preparations of

(Continued on page xxii)

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Digitalis and Strophanthus." Dr. A. N. Ferguson gave a paper entitled "A Concept of Heart Disease."

The May seventh meeting was held at the St. Joseph's Hospital. Reports on unusual medical cases were given by Drs. Edward McArdle, J. L. Wyatt, H. O. Bruggeman, C. J. Rothschild, M. R. Lohman, and H. A. Ray, all of Fort Wayne.

* * *

Greene County Medical Society held a meeting May sixteenth at the Linton Greene County Hospital. Dr. H. J. Pierce of Terre Haute was guest speaker. His topic was "General Conditions of Carcinoma." Thirteen members were present.

* * *

Henry County Medical Society held a meeting April eighteenth, at the Henry County Hospital. Dr. E. Vernon Hahn of Indianapolis was the guest speaker. He discussed "Chest Conditions and Lung Collapsing."

* * *

Huntington County Medical Society met for a dinner meeting at the Hotel Lafontaine, Huntington, May seventh. Dr. E. R. Carlo of Fort Wayne presented a paper entitled "Heart Disease in Children." Attendance numbered sixteen.

* * *

Indianapolis (Marion County) Medical Society met April sixteenth at the Lincoln Hotel. Guest speakers for the evening were Dr. J. A. Myers, of Minneapolis, Minnesota, whose topic was "Scientific Procedures in the Diagnosis and Control of Tuberculosis," and Dr. H. E. Kleinschmidt, of New York City, who spoke on "Some Considerations in the Diagnosis of Tuberculosis."

April twenty-third a meeting was held at the Indianapolis Athletic Club. A technicolor talkie, "Studies in Ovulation with Pregnant Mares Serum," was presented at 7:30 p. m., after which talks were given by: Dr. R. H. Moser, on "Bile Salt Therapy in Gall Bladder Disease"; Dr. H. A. Brocksmith, on "Antacid Therapy in Ulcer Management"; Dr. Mason Light, on "The Use of the Flexible Gastroscope," and Dr. Bernard Rosenak, on "Gastritis."

The April thirtieth meeting was held at the Indianapolis Athletic Club. New methods of treating syphilis were discussed by Dr. Paul O'Leary of the Mayo Clinic.

The annual spring frolic was held May eleventh at the Columbia Club. The program included dinner, dramatics, and dancing.

* * *

Jay County Medical Society members held a meeting at the Jay County Hospital, Portland, May third. Dr. Frank C. Walker of Indianapolis presented a paper on "Medical Gynecology for the General Practitioner."

Johnson County Medical Society members met at Franklin, April tenth, to hear Dr. Russell Sage of Indianapolis talk on "Conditions of the Tongue." Attendance numbered eight.

* * *

Knox County Medical Society met at Vincennes, at the Jewel Cafe, April twenty-third. Dr. H. W. Trusler of Indianapolis, as guest speaker, spoke on "Plastic Surgery." A resolution was passed approving the establishment of a mental hygiene clinic in Knox County. Twenty-five members were present.

* * *

LaPorte County Medical Society members met at Hotel Rumely, Laporte, April eighteenth, for a dinner meeting. Speaker of the evening, Dr. H. O. Jones, of Chicago, conducted a round table discussion of some common gynecological problems. Twenty-five members were present.

* * *

La Porte County Medical Society members met at Pottawattamie Country Club, Michigan City, May sixteenth, for a dinner meeting. Dr. J. S. Coulter of Chicago talked on "Diathermy and Physical Therapy" before the twenty-five members who attended.

* * *

Madison County Medical Society and Madison County Dental Society held a joint meeting at the Country Club, April fifteenth. Dr. C. B. Jordan, dean of the Purdue School of Pharmacy of Lafayette, was the principal speaker.

* * *

Madison County Medical Society members met at St. John's Hospital, May twentieth, with the program consisting of a symposium on goiter conducted by Drs. T. M. Jones, C. S. Wright, and Lloyd Rosenbaum.

* * *

Miami County Medical Society held a dinner meeting at Peru, March twenty-ninth. Speakers were Dr. Charles J. Cooney and Dr. Wayne R. Glock, both of Fort Wayne, who discussed "Traumatic Injuries of the Urinary Tract" and "Fractures of the Pelvis." Attendance numbered twenty.

At the meeting held April twenty-sixth at Peru, arrangements were made for buying a motion picture projector. Nine members were present.

* * *

Monroe County Medical Society held a meeting at Bloomington, April twenty-fourth. A paper entitled "Dangers of the Miscellaneous Lay Use of Bromides and Barbiturates" was presented by Dr. E. Rogers Smith and Dr. Murray DeArmond, both of Indianapolis. Twenty-five members were present.

(Continued on page xxiv)

SILVER PICRATE

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Monilia albicans

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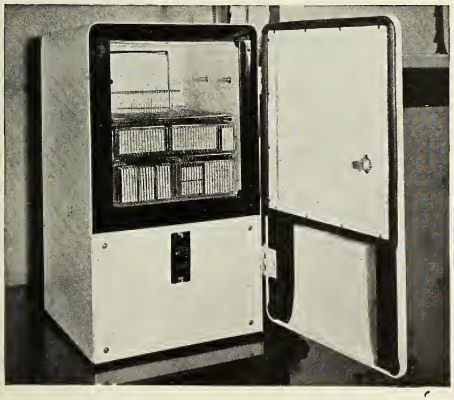
Complete literature on Silver Picrate as used in genitourinary and gynecological practice will be mailed on request.

*"Treatment of Acute Anterior Urethritis with Silver Picrate," Knight and Shelanski, AMERICAN JOURNAL OF SYPHILIS, GONORRHEA AND VENEREAL DISEASES, Vol. 23, No. 2, pages 201-206, March, 1939.

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SOCIETY REPORTS—Continued from page xxii

Muncie Academy of Medicine had for the guest speaker, May fourteenth, Dr. K. K. Chen of Indianapolis whose subject was, "How the Chinese Stand the Stress and Strain."

* * *

Muncie Academy of Medicine met at Hotel Roberts, Muncie, April thirtieth. Dr. Neil W. Swinton of Boston, Mass., presented a paper on "Some of the Problems of Ano-rectal Surgery."

* * *

Parke-Vermillion County Medical Society held a meeting at the Clinton Hospital, Clinton, April seventeenth. A talk on "Varicose Veins of Extremities and Their Treatment" was given by Dr. O. O. Alexander of Terre Haute. Ten members were present.

* * *

Parke-Vermillion County Medical Society held a meeting May fifteenth at the Clinton Hospital. They had as their guest speaker Dr. A. W. Cavins of Terre Haute. He presented a paper entitled "Myomas." Ten members were present.

* * *

Randolph County Medical Society met May thirteenth at the Randolph County Hospital in Winchester. Dr. Winfield Scott, of Indianapolis, was speaker of the evening. His topic for discussion was "Convulsions, Their Cause and Treatment."

* * *

St. Joseph County Medical Society members met in the Bronzewood Room, LaSalle Hotel, South Bend, April seventeenth. The guest speaker of the evening was Dr. Vincent O'Connor, who presented a paper on "Recent Advances in Urology." Thirty members attended the meeting.

April twenty-third a meeting was held at the LaSalle Hotel. "Muscle Anomalies" and "Conservation of Vision" were the topics of the papers read by Dr. C. J. Rudolph, of South Bend. Attendance numbered forty.

* * *

At the April meeting of the **Tipton County Medical Society**, Dr. J. H. Warvel, of Indianapolis, talked on "Pituitary Disturbances." Dr. J. V. Carter presented two cases.

INDIANA STATE BOARD OF HEALTH

BUREAU OF COMMUNICABLE DISEASES

Monthly Report, April, 1940

Diseases	*April 1940*	*March 1940*	*February 1940*	*April 1939*	*April 1938*
Tuberculosis	146	188	73	240	228
Chickenpox	309	404	274	386	311
Measles	105	64	26	100	5745
Scarlet Fever	766	1179	849	961	597
Smallpox	6	15	10	220	351
Typhoid Fever	9	4	15	6	29
Whooping Cough	135	205	149	245	128
Diphtheria	16	41	66	46	95
Influenza	72	10318	1115	330	48
Pneumonia	59	88	142	132	90
Mumps	552	1688	495	270	131
Meningitis	5	7	1	4	6
Trachoma	2	21	6	2	0
Erysipelas	2	0	0	0	0
Septic Sore Throat	2	6	7	2	0
Malaria	3	1	1	0	0
Undulant Fever	4	5	1	5	11

SOUND MEDICAL VIEWS

Sound and practical views on maintenance of an efficient public health program were expressed by Senator Robert A. Taft, Republican presidential candidate, in an address before the Ohio State Medical Association at Cincinnati. The speaker's point of view was doubly reassuring in contrast with the socialistic theories of the New Deal, which has sponsored an organized campaign to regiment the country's medical profession.

The Ohio senator approved adequate Federal assistance to the ailing needy, but he attacked socialized medicine as a "demoralizing medical dole." His experience in witnessing the reckless squandering of billions by New Deal theorists naturally inspires opposition to similar waste in the promotion of an undesirable public health program. Unless properly planned, it would do more harm than good, Senator Taft informed the medical association membership. The details and the general planning must be handled by professional leaders and not by the Washington sophomores concerned chiefly with spending in the interest of national regimentation.

Compulsory health insurance and socialized medicine are directly opposed to the American way of life. Medical standards will collapse if politicians in Washington dominate the profession, placing doctors on fixed salaries and making them pawns in a political and socialistic machine. Senator Taft did not exaggerate in branding th eWagner health bill as "an extraordinarily dangerous way of dealing with the subject." The complexities of the proposed system, the demands made upon the states, the waste of public funds involved and the sacrifice of professional standards are typical of the New Deal technique.

Critical conditions abroad should not blind Americans to the necessity of safeguarding the home front against socialistic schemes. Reduction in the cost of medical care is essential. Responsibility rests largely with the states, which should not be forced to accept the blighting effects of standardized mediocrity characteristic of politics, bureaucracy and red tape inherent in control by Washington. Every citizen will suffer to some degree when the independence of the medical profession is threatened.

—Editorial, Indianapolis *Star*, May 19, 1940.

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THE MANAGEMENT OF BRIGHT'S DISEASE*

IRVINE H. PAGE, M.D.†
INDIANAPOLIS

The management of patients suffering from Bright's disease depends on an understanding of the nature of the disease and its different stages. Even the aims of treatment differ during these stages. In short, during the acute phase the aim is to prevent the disease from becoming chronic, for if it can be overcome in this phase, experience shows that cure can be confidently anticipated. During the chronic phase the aim is to maintain the patient's tissues against the ravages of a chronic wasting disease and to treat symptoms and signs as they arise, with the knowledge that the prognosis is ultimately bad. The aim during the terminal phase is to make exitus as easy as possible, avoiding meddlesome therapy.

The stages of Bright's disease[1] may be somewhat arbitrarily defined as: (1) the acute stage characterized by edema usually of inflammatory origin (non-hypoproteinemic), often the occurrence of an infectious process, rapid reduction of renal efficiency, hematuria, gross or microscopic, proteinuria, modest rise of arterial pressure, and, not unusually, convulsions and heart failure; (2) *the chronic* stage characterized by edema of hypoproteinemic origin, slow progressive loss of renal efficiency, hematuria often only detectable by a count of the red blood cells in the urine, proteinuria, and moderate to marked persistent arterial hypertension; and (3) *the terminal phase* characterized by either gradual disappearance of the edema of the chronic phase with rise toward normal of the plasma proteins or substitution of the hypoproteinemic edema by the edema of heart failure, reduction of renal efficiency to 20 percent of normal or below, as measured by Van Slyke's urea clearance, polyuria often with diminished excretion of protein in the urine, hemorrhages, exudates and papilledema in the eyegrounds, often marked rise in arterial pressure, moderate to marked acidosis, heart failure, itching, finally convulsions and coma. A *nephrotic phase* of chronic Bright's disease is commonly recognized and by this is meant that though the basic morbid process is chronic progressive nephritis, the signs and symptoms of nephrosis are sufficiently marked to give the impression at the bedside that it is in fact true nephrosis. The chief characteristics are massive edema and proteinuria with hypoproteinemia and lipemia. Usually more than normal numbers of red blood cells continue to be excreted and gradual loss of renal function continues.

Treatment, it will be recognized, must also be guided by discriminating use of proper laboratory examinations. In the following discussion those methods will be mentioned which have proved of greatest practical importance in our hands.

ACUTE BRIGHT'S DISEASE

The onset may be sudden and stormy, often following an infection. It may be insidious without definite evidence of infection. The transition into the chronic phase may be accompanied by so few signs and symptoms that no acute phase is detectable, and when the patient seeks medical advice the disease is already chronic. Indeed, it may be questioned whether they ever have passed through an acute phase.

Clinical experience has shown that patients with the sudden, turbulent, bloody onset, despite the lugubriousness of the moment, have a much better outlook for cure than those with an insidious onset. The patient in whom the onset is gradual, whose symptoms are mild, and in whom renal efficiency is

[1] Van Slyke, D. D., Stillman, E., Möller, E, Ehrich, W., McIntosh, J. F., Leiter, L., MacKay, E. M., Hannon, R. R., Moore, N. S., and Johnson, C.: *Medicine* **9**, 257, (1930).

† Lilly Laboratory for Clinical Research, Indianapolis City Hospital.

* Address delivered May 8, 1940, at the Postgraduate Course, Indiana University School of Medicine, Indianapolis, Indiana.

already low is the one who has subtly acquired the chronic disease.

Edema usually appears over the face and hands with less extensive involvement of the legs. It is not so dependent on gravity as in chronic nephritis.

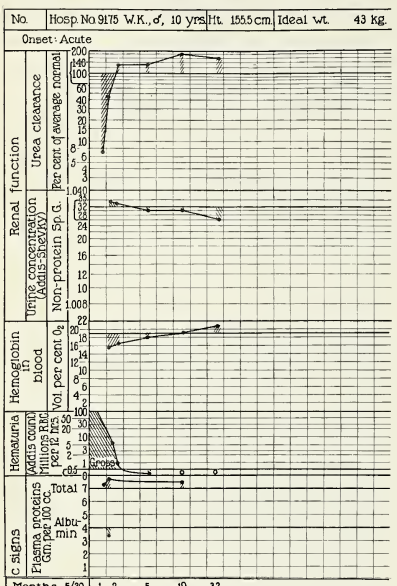


Figure I.—A typical case of acute Bright's disease subsequently becoming cured. The onset was about 3 weeks before admission. Note the precipitate fall in urea clearance with rapid recovery. The maximum ability to concentrate urine could not be determined until the urea clearance had returned nearly to normal. The gross hematuria disappeared in 2 months and plasma proteins were never reduced through the globulin was slightly increased.

Measurement of the plasma proteins shows them to be normal and the globulin fraction is often increased presumably as a result of infection. It is believed that the edema is caused by increased permeability of the capillaries which allows escape of plasma proteins into the tissue and accumulation of an amount of water sufficient to satisfy the osmotic requirement of the exuded proteins. This edema requires no treatment. It serves the useful function of calling the patient's and the physician's attention to the onset of a serious disease. In some patients transition from the edema of acute nephritis with normal plasma proteins to the edema of chronic nephritis with hypoproteinemia is very rapid. This is not a good prognostic sign, but need not preclude recovery. It is a sign which should be watched for because it warns that treatment must be greatly prolonged.

Infection usually precedes the onset of acute nephritis. The usual invader is the hemolytic streptococcus or the minute beta-hemolytic streptococcus. Occasionally the pneumococcus is the cause, more rarely the staphylococcus. It is perhaps a wise rule to treat acute nephritis as though it were an acute infectious process. There seems no reason, therefore, for withholding adequate doses of either sulfanilamide or sulfapyridine. These drugs should never be given to a nephritic without determining their concentration in the blood because their excretion is interfered with by reduced renal function, hence toxic concentrations may be reached long before similar doses would do so in normal human beings. The dosage, therefore, is controlled by establishing a blood level of about 10 mg. percent for sulfanilamide and 5 to 7 mg. per cent for sulfapyridine. Except for toxic effects of these drugs, the only danger appears to be the formation of concretions in the kidney due to precipitation of the relatively insoluble acetyl derivatives of sulfapyridine. Occasionally edema becomes more marked when they are administered.

It is desirable that the temperature of the room be kept between 76° to 78° F. and as constant as possible, that the patient wear warm pajamas, preferably with socks, and that the nursing care be that of an acutely ill patient. Bathroom privileges should not be allowed.

There is some divergence of opinion regarding the surgical treatment of foci of infection.[2, 3, 4] The utmost gentleness should be employed in any treatment during this stage and operations should be postponed until the infection and the nephritis have slackened in their intensity. When this has occurred, it seems wise to do such procedures as tonsillectomy, sinus washing, extraction of abscessed teeth, etc., as seem indicated. During the height of the infection only emergency operations should be done, such as appendectomy, lancing the ear drum or peritonsillar abscesses.

Rest.—Insufficient attention is ordinarily given to the amount of rest required by a patient with Bright's disease. It has seemed to me that since there is no hope of reducing the work of the kidneys by reducing the diet below the energy requirements of the body, the logical concern is to curtail the requirements. This can be done by insisting on the patient's remaining quietly in bed with the least possible disturbance to body and mind. The patient is to try and "live like a vegetable". It is wise to explain this early in the course of the disease when the patient feels ill. If properly instilled, the regimen will carry through most of the period of convalescence. It is particularly important, if feasible, to remove a child from the home and its

[2] Guild, H. G.: *Bull. Johns Hopkins Hosp.* **48**, 193, (1931).

[3] Page, I. H. and Alving, A.: J. *Clin. Invest.* **11**, 1037, (1932).

[4] Murphy, F. D.: *Wisconsin Med. J.* July, p. 465, (1933).

parents, allowing visiting only twice a week. I have repeatedly found that, under an orderly routine, no difficulty is experienced in keeping the child quiet or getting the diet consumed.

Prescription of rest, unless given with conviction, loses its effectiveness because it is so commonplace. It is difficult to prove that prolonged and adequate rest changes the course of the disease from the acute to the healing stage, instead of to the chronic stage. But it seems fair to say that the practice is becoming commoner in the clinics most experienced in the treatment of nephritis. When the disease becomes chronic, there is no longer any especial reason for prolonged rest.

Diet.—During the first few weeks of the disease, if the onset is stormy, it makes little difference what is fed since the patient ordinarily has little appetite. In general the rule may be followed that the diet should be one that would be given during the course of an infection.

After the first few weeks more food will be given and this may consist of balanced amounts of carbohydrate, fat, and protein. Sharp difference of opinion exists as to whether low or high protein diets should be fed. The protagonists of each theory from time to time have held the field only to lose it when a new bit of experimental evidence has been turned up. There are excellent arguments on both sides, and it appears that by steering a middle course many of the advantages of both views can be utilized.

Roughly from 40 to 60 grams of both vegetable and animal protein is given to an adult. Children require somewhat more, 2 to 3 grams per kilogram of body weight.

Since the requirement for vitamins is greatly increased during infectious and wasting diseases, more than the usual amounts should be given to patients with nephritis. This should include vitamins A, B complex, C and D.

There is no reason for limiting the salt and water intake unless hypoproteinemic edema or heart failure is present. Some physicians, particularly in Germany, believe that salt had best be eliminated and fluid reduced to a minimum, thereby hoping to reduce the incidence of cardiac failure. This may be true, but as yet there is no proof for it. Indeed, Volhard employs what he calls the "Hunger-Durst Kur," which consists of complete starvation without water for 3 to 5 days during the acute stage of nephritis. It is his conviction that less cardiac failure and chronic nephritis results. Unfortunately, this is still a matter of opinion.

Both high acid-ash and basic-ash diets have been recommended. Neither one appears to have any especial advantage over the other, though the higher protein content of the acid-ash diet may be of some value.[5]

Heart Failure.—Heart failure during the course of acute nephritis appears to be a less usual complication in the United States than on the continent. Some injury to the heart, as indicated by an abnormal electrocardiogram, is not uncommon.[6] Its principal importance is to caution against terminating bedrest too early.

The treatment of heart failure in nephritis is the same as that employed for the more common types of congestive failure, and includes low salt diet, restriction of fluids and adequate amounts of digitalis.

Hypertension.—During the acute phase hypertension, usually of modest grade, may occur. It often causes great alarm, but in most cases needlessly. In children, especially, the rise in arterial pressure often presages convulsions, but this is by no means always true. Fortunately, hypertension usually does not persist and, strangely enough, does not appear to influence the prognosis. As many patients without hypertension pass into the chronic stage as those with it.

No treatment except profound rest and possibly magnesium sulfate injections appear to influence it. Indeed no treatment seems necessary.

Convulsions and Cerebral Complications.—Convulsions are rare in adults and not uncommon in children. They terrify the parents, but experience has shown that their results are not as lugubrious as they seem, provided anuria is not present. They are often associated with a rising blood pressure, especially the diastolic. The spinal fluid pressure may or may not be elevated. They have no necessary relationship to retention products in the blood.

Their treatment consists, first, of preventing injury to the patient during the seizures and, second, of giving about 250 cc. of 50 percent sucrose intravenously, very slowly if heart failure is threatening. Magnesium sulfate (20 cc. of 10 percent solution repeated several times) may be used. If given intramuscularly in doses of 0.3 cc. of a 25 percent solution for every kilogram of body weight, it has value in preventing convulsions.[7, 8] This dose may be repeated in four hours. Spinal tap with removal of from 15 to 20 cc. of spinal fluid is often a useful procedure.

If the convulsions continue, an intravenous injection of pentobarbital sodium (gr. iii) may be administered.

Anuria.—This complication of acute nephritis is serious. It is heralded by progressively increasing oliguria and this is one of the chief reasons why the intake and output of all patients with acute nephritis should be measured. A certain degree of oliguria is to be expected during acute nephritis, but when the output falls below 700 cc. with adequate fluid intake, trouble may be anticipated.

[5] Murphy, F. D. and Pietraszewski, B. J.: Internat'l. Clinics **1**, 11 (1940).

[6] Master, A. M., Jaffe, H. L. and Dock, S.: *Am. Heart J.* **60**, 1016 (1937).

[7] Blackfan, K. D. and Hamilton, B.: *Boston M. and S. J.* **193**, 617 (1925).

[8] Blackfan, K. D.: *Bull. Johns Hopkins Hosp.* **39**, 69 (1926).

It is of first importance to catheterize the patient to ascertain that no mechanical obstruction is present. Next, 50 percent glucose should be given by vein. A hot bath lasting for 30 minutes or more may be tried simultaneously administering 400 to 500 cc. of fruit juice. If acidosis is present, it should be corrected by administration of the necessary amount (see figure III) of sodium bicarbonate by vein. If all these fail and little or no urine has been passed for 3 days, decapsulation of the kidney should be considered.

Decapsulation ought to be undertaken only when a surgeon skillful in the procedure is available. The operation should be performed with maximum speed under ether anesthesia.

Many children exhibit vomiting and drowsiness and complain of severe headache. Blood pressure is almost always elevated and renal function depressed. This syndrome is benefited by administering 30 to 120 cc. of 50 percent magnesium sulfate by mouth daily.[9]

CHRONIC BRIGHT'S DISEASE

Chronic nephritis is foremost a wasting disease, replacing tissue with edema fluid. The prognosis is almost always bad. For these reasons the aim is to maintain adequate nutrition and enjoyment of life while it lasts, realizing fully what must inevitably transpire.

It is highly desirable to follow the course of chronic nephritis by proper laboratory procedures. Not only do these insure accuracy of diagnosis, but they guide treatment and ordinarily clearly indicate the prognosis.

The urea clearance is again the mainstay,[1] combining, as it does, measurement of so many functions of the kidneys, chief among which is the measurement of the renal blood flow. During the chronic stage, determination of the maximum ability of the kidneys to concentrate urine is an almost equally useful test. It should replace completely the desultory investigations of the specific gravity of casual specimens of urine. The latter have almost no place in the study of nephritics.

Plasma proteins may be determined by one of the usual chemical methods or, for bedside examination to ascertain whether edema is due to hypoproteinemia, by the simple specific gravity method. Determination of the amount of plasma proteins gives valuable aid in prognosis. Along with the plasma proteins, the amount of protein being lost in the urine should be ascertained. The latter method is so simple that it is difficult to understand the reluctance of most physicians to employ it. Hardly more time is required than in the simple boiling procedure which tells little about the wastage of protein from the body. Clinical experience shows that if six grams or more of protein is being lost in 24 hours, hypoproteinemic edema will almost surely be present.

Blood hemoglobin is a moderately useful determination. It is of little diagnostic importance but aids somewhat in prognosis. If a method of elevating the reduced hemoglobin were known, the determination of it would be of great value. Unfortunately there is none.

For those who have the time and interest, the so-called Addis count of the number of red and white blood cells and casts is highly informing. This examination must be done with care but the results are rewarding. There are several other laboratory procedures such as the special clearances (diodrast, inulin, phenol red, etc.) which aid in a complete examination but they are not essential. The simple procedures alluded to, performed with accuracy and understanding, will keep the nub of the problem clearly defined.

Edema.—The edema of chronic nephritis is due chiefly to the reduced osmotic attraction exerted by the plasma proteins on the plasma water. The result is that water passes from the blood stream into the tissues (extra-cellular water) and enough salt is retained by this water to make a so-called "physiological salt solution."

Hypoproteinemia, which means reduction of both plasma albumin and globulin, causes visible edema when the normal amount of 7 grams per 100 cc. of total plasma proteins is reduced to 4.5 to 5 grams and the albumin below 2 grams. If they are only slightly above these levels, the occurrence of edema will usually depend on whether salt restriction and bed rest have been prescribed.

The cause of the hypoproteinemia is often difficult or impossible to ascertain. In some patients an inadequate quota of protein in the diet is responsible, in others the loss of protein in the urine is so great that intake and synthesis cannot keep up with the loss. Perhaps in a few, the ability to synthesize plasma proteins is impaired, and in others, the level in the blood is set lower than in normal people.

A second factor of great importance in the genesis of nephrotic edema is salt. It has been known for many years from clinical observation that the intake of salt influences the appearance and extent of edema. Water cannot be retained without an equivalent amount of salt, nor salt without an equivalent amount of water. Even in normal persons, large amounts of salt will produce edema. But in patients with edema and decreased colloid osmotic pressure of the blood, there is a magnified tendency to retain salt along with sufficient water to form physiological saline solution.

A third factor in influencing the occurrence of nephrotic edema is drainage of lymph. In the stagnation edema of cardiac origin, the draining of extra-cellular fluid back into the blood stream is abnormally slow, while in nephrotic edema it is abnormally fast even when edema fluid is accumulating. It is extraordinarily rapid in periods of diuresis.[10]

The treatment of nephrotic edema depends on correcting the faults just described as the known causes of edema.

[9] Aldrich, C. A.: *Am. J. Dis. Child.* **41**, 1265 (1931).

[10] McMaster, P. D.: *J. Exp. Med.* **65**, 373 (1937).

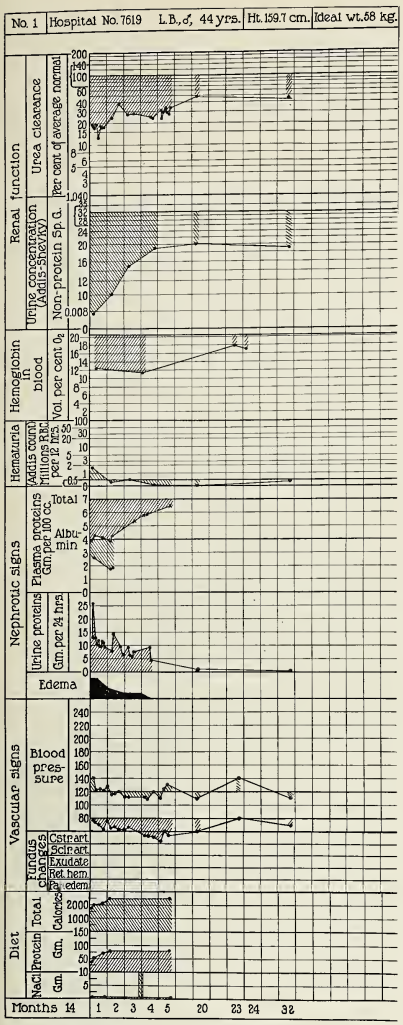


Figure II.—Example of response of plasma proteins to adequate protein feeding in a case of chronic nephritis. Note the rapid rise of plasma proteins, the disappearance of edema, and the rise both in urea clearance and maximal ability to concentrate urine.

Restriction of salt is imperative. The patient should not excrete more than 2 grams, and if a child, less than 1 gram, of salt a day in the urine, and this should be ascertained by weekly analysis of the chlorides in the urine. It is surprising how many patients either through ignorance, carelessness, or willfulness do not take a salt-free diet despite what appears to be sufficient instructions. The only way to be certain that the diet is salt-free is periodic analysis of a 24-hour urine specimen. I am convinced that the failure of low-salt diets to aid in reducing edema is, in most cases, due to failure to receive a diet actually low in salt rather than other causes. Certain patients with nephritis exhibit marked rise in arterial pressure and depression of urea clearance when as much as 15 grams of salt are taken.[11] Replacement of the sodium with potassium chloride causes a prompt rise in clearances and fall in blood pressure.

Restriction of water is unnecessary and undesirable. Patients with nephrotic edema will not retain water unless with it they retain a physiologically equivalent amount of sodium salts. Even large volumes of water given without salt are excreted without difficulty; in fact, the diuresis may hasten salt excretion and reduction of edema.

Diuretics appear to be of somewhat limited value in nephrotic edema. Presumably by paralyzing the tubular cells of the kidneys and hence their ability to reabsorb water, diuresis is induced. The underlying fault which is causing the edema is not corrected, and, therefore, the edema returns quite promptly after discontinuing the diuretic. However, the acid-forming salts may aid in the excretion of sodium so ridding the body of one of the agents causing edema. This fact gives these salts a definite place in its treatment. The dose of ammonium nitrate is 8 to 10 grams daily and of potassium nitrate 10 to 12 grams. They can be given over a prolonged period if the patient is under observation. Potassium nitrate appears to cause less disturbance in the body than ammonium chloride and is, on the whole, to be preferred. The drug should be administered in 0.5 gram enteric-coated pills.

Since lymph flow is very rapid, even when edema fluid is accumulating in chronic nephritis, it seems desirable to maintain it at as high a level as possible. Massage and exercise seem to be the most practical methods. Gravity impedes the flow and for this reason, when the edema is massive, the patient must be kept in bed with the limbs slightly elevated to aid in retrograde flow of the lymph. Regular massage and movement of the limbs is also of value. When the edema is of modest proportions, many patients improve when they are allowed to be up and exercise moderately. We have repeatedly noticed that patients in this state often become rapidly free of edema on leaving the hospital. Bed rest is not an unmixed blessing in the treatment of moderate nephrotic edema and should be employed with discrimination.

Diet.—Large amounts of protein are lost in the urine during chronic nephritis and this must be replaced by protein taken by mouth. If too large

[11] Barker, M. H.: *J.A.M.A.* **111**, 1907 (1938).

amounts—over 100 grams daily—are consumed, no greater benefit is derived as the patient usually loses his appetite and, even though the protein is taken, the storage of it does not appear to be greater than when the intake is lower. Clinical experience has shown that from 70 to 100 grams of protein daily in adults and 3.2 grams per kilogram of ideal body weight in children[12] is the optimal amount.

Animal proteins should predominate. One of the simplest ways to administer proteins is by giving edible casein. It can be given as a very palatable drink with several flavorings.[13]

Definite benefits to tissue nutrition, water balance and general clinical condition result from avoiding low protein diets. Shift from low to high protein diets causes protein storage in the tissues of the patient, so combating the wasting and malnutrition of the disease and the increased susceptibility to infection. The plasma proteins may or may not rise significantly as a result of feeding adequate amounts of protein. In general, if the patient has previously been consuming a diet low in protein, then shift to a high protein diet is followed by rise in plasma proteins within a month or two. Even though the rise does not occur within this period, it should not cause discouragement as it is not unusually postponed for several months.

Many patients, especially those who are well nourished, do not respond with a rise in plasma proteins on the high protein diet. Such patients, however, should be maintained on the diet because they feel better and do not exhibit the malnutrition so evident in protein-poor diets.

It is interesting that in both animals and man, but especially children,[14] urea clearance varies markedly with protein intake. Thus with protein intake of 0.5, 1.0, 2, 3, and 4 grams per kilo per day, Farr found average urea clearance of 73, 88, 178, 184 and 216 per cent of mean normal respectively.

There is no contra-indication to the administration of the usual amounts of fat and carbohydrate in the diet. Fat has been restricted by some physicians in the belief that the usual lipemia of the nephrotic stage of chronic nephritis is so reduced. However, careful investigation has shown that the post-absorptive level of fat in the blood in patients is little influenced by the fat content of the diet.[15] Nor is there any evidence that fat combustion is abnormal in this disease.[16]

The vitamin requirement of chronic nephritics is probably higher than normal, hence it seems desirable to supplement the diet by regular use of one of the reliable mixed vitamin concentrates.

I have never been able to appreciate the value of so-called "nephritic menus." The underlying principles of the diet should be followed without making a burden of it. *Restrictions* seem limited entirely to salt; *additions*, to increasing moderately the amount of protein and vitamins. At the risk of overemphasis, it should be remembered that in many cases the most important thing is not to do the wrong thing.

Subsidiary Measures in Treatment of Nephrotic Edema

(1) *Acacia.*—Occasionally, because of inability to rid the patient of edema and the ensuing discouragement, injections of acacia (30 to 60 grams in 300 to 600 cc. of water) may be given. Diuresis may be so initiated. On the whole, it seems better to avoid acacia if possible, chiefly because of the occasional occurrence of a shock-like syndrome with reduction of renal function. It seems wise to reserve acacia for treatment of shock where it may be life-saving.

(2) *Renal denervation.*—Stripping the renal pedicle of its nerves not unusually aids in ridding the patient of edema.[17, 18] The operation is simple and should have no mortality. The mechanism of this diuresis is unknown.

(3) *Anterior pituitary extracts with thyroid.*—We have employed injections of acid-extracts of whole anterior pituitary with some success in the treatment of nephrotic edema. Its effectiveness seems to be enhanced by administration of two or more grains of thyroid.

(4) *Thyroid.*—Opinion regarding the effectiveness of thyroid in the treatment of nephrotic edema is diverse.[19] Despite the fact that at one time it was employed almost universally, it appears to have somewhat fallen into disfavor.

We have found it useful when combined with anterior pituitary extract but have not been able to convince ourselves that alone, given over periods of weeks to several months, it possesses any great virtue.

It seems desirable, however, to point out that on theoretical grounds, thyroid administration may be of great importance. It is known that administration of iodine permits the deposition of lipids in the walls of the blood vessels when cholesterol is fed to rabbits despite the fact that it does not reduce the lipemia. Thyroid does not reduce the fats in the blood of chronic nephritics or nephrotics but it may prevent their deposition in the blood vessels and especially in the tubular cells of the kidneys. One of the most impressive features of the autopsy of these patients is the bright yellow lipid, swelling the kidneys and roughening the surfaces of the blood vessels. For this reason, adequate

[12] Farr, L. E.: *Am. J. Med. Sci.* **195**, 70 (1938).

[13] Page, I. H.: Med. Clin. North America. Nov. p. 1831 (1937).

[14] Farr, L. E.: *J. Clin. Invest.* **15**, 703 (1936).

[15] Page, I. H. and Farr, L. E.: *J. Clin. Invest.* **15**, 181 (1936).

[16] Hiller, A., Linder, G. C., Lundsgaard, C. and Van Slyke, D. D.: *J. Exp. Med.* **39**, 931 (1924).

[17] Page, I. H.: Med. Clin. North America. Nov. p. 867 (1934).

[18] Page, I. H. and Heuer, G. E.: *J. Clin. Invest.* **14**, 443 (1935).

[19] Epstein, A. A.: *Am. J. Med. Sci.* **163**, 167 (1922).

amounts of thyroid may be useful over long periods. If the basal metabolism is low, as it often is during nephrosis, thyroid administration seems desirable. Larger doses than usual are said to be required to restore the metabolism to normal. The published evidence on which this belief is based is not altogether convincing, though from clinical experience it appears to be true.

ANEMIA

Hypochromic anemia may become severe during the course of chronic nephritis as evidenced by progressive fall in hemoglobin. Unfortunately, there is no treatment of proved value for it. Occasionally hemorrhages occur, especially into the gastro-intestinal tract, associated with a sharp fall in hemoglobin. Administration of ferrous sulfate (gr. 5 enseals or tablets equivalent to 125 mg. of iron, 2 tablets after each meal) aids in restoring it to its previous level. But it does not carry the hemoglobin to a level higher than it was before the hemorrhage.

TERMINAL BRIGHT'S DISEASE

When the terminal stage of the disease has been reached, the aim of treatment is to treat symptoms as they arise, maintain electrolyte and water balances, etc., as normal as possible, but chiefly to make the final weeks or months of life bearable and happy. For these reasons, many of the restrictions should be raised and the patient urged to be up and about doing those things which bring him pleasure. The relatives of the patient should be told of the situation and urged to provide money, if feasible, that these pleasures may be made possible. It is, I think, a therapeutic achievement when the patient walks into the hospital and dies a few days or weeks after admission. It indicates that despite the serious disarrangement caused by uremia, life has been made bearable, even enjoyable.

The physician will recognize the terminal phase by the appearance or intensification of the morbid changes in the eyegrounds, perhaps an intensification or initial appearance of arterial hypertension, reduction of urea clearance below 20 per cent of normal or fixation of the specific gravity of the urine at 1.010 or below.[20] It is an interesting fact that as uremia approaches, the edema due to hypoproteinemia tends to disappear and the plasma proteins rise toward normal. But its place may, and usually is, taken by edema due to heart failure or they may coexist. The latter is due chiefly to stagnation of the blood stream with local tissue anoxia and increase in permeability to proteins of the capillaries.

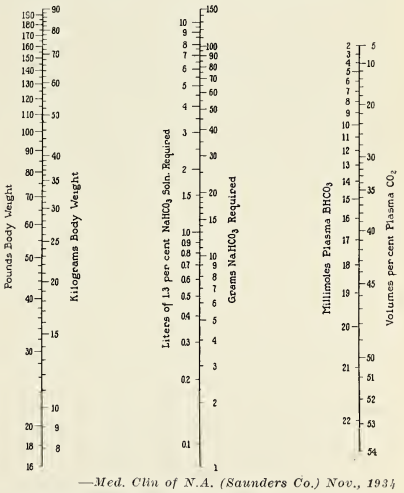
It is desirable to add to those laboratory procedures employed during the chronic phase two further determinations. These are the CO_2 combining power of the plasma and the chloride content of the blood. It will be evident a little later in the discussion why this is true.

Treatment consists, first and foremost, in making the patient happy. It is certain that most patients do not especially enjoy a hospital bed. We have found it good practice to have the patient in and out of the hospital whenever the patient feels all is not well or is losing heart. In some, cardiac failure becomes so severe that bed is the only place possible for them.

Diet.—The appetite is failing and there is nothing to be gained by forcing the patient to eat any special diet. On the whole a diet containing only moderate amounts (30 to 40 grams) of protein seems best. The rest of it will be cared for by the desires of the patient. Often an alcoholic beverage such as creme de menthe, cognac or port wine aids the appetite when taken 15 minutes before supper. Vitamin B may or may not aid the appetite; it is difficult to be sure.

Care should be exercised in restricting the salt content of the diet. During the terminal phase, the loss of ability of the kidneys to concentrate urine causes polyuria. This results in the washing out of the body of large amounts of salt and, unless it is replaced, may lead to hypochloremic uremia. Occasionally such a patient is seen in whom administration of salt leads to temporary recovery, and life may be prolonged as much as a year and a half. The value of ascertaining the chloride content of the plasma will be evident.

While salt must be given to avoid hypochloremic uremia, the occurrence of heart failure contraindicates its use. The best that can be done is not



—*Med. Clin of N.A. (Saunders Co.) Nov., 1934*

Figure III.—Line chart for calculation of bicarbonate required to restore normal alkali reserve.

[20] Page, I. H.: *Ann. Int. Med.* **9**, 1419 (1936).

to give too much nor too little, in short, to keep the chloride content of the blood normal, but avoid large excretion in the urine. While no rule holds, experience has shown that about 4 grams of NaCl is adequate. If salt is administered without equivalent amounts of water, the salt is retained. For this reason, ingestion of salt must be accompanied by enough fluid to insure adequate urine flow.

Acidosis.—The retention of chiefly fixed acids, loss of base by vomiting, and the decreased formation of ammonia by the kidneys leads to acidosis. It increases the nausea and vomiting of uremia and adds the dyspnea of acidosis to the distress of the patient. It should be anticipated by administration of alkali in repeated doses of 3 to 5 grams by mouth.

If it is necessary to give it by vein, the solid bicarbonate may be sterilized by dry heat in packages and then dissolved in sterile water or saline to make an isotonic solution (13 grams per liter). The amount of bicarbonate required to restore normal alkali reserve should be calculated from the CO_2 content of the blood plasma. The amount required to raise the alkaline reserve to the point indicated by 60 volumes percent of plasma CO_2 content and pH 7.4 are indicated by the line chart in Figure III (Palmer and Van Slyke). Bicarbonate should not be given by hit-or-miss method since it is so easy to ascertain approximately the necessary dose.

Anemia.—Iron is only useful in the treatment of the anemia of terminal nephritis when chronic hemorrhage is occurring. It must be given with caution because it may do more harm than good by upsettng the patient's stomach.

Heart Failure.—The treatment of heart failure during uremia does not differ from the usual treatment of it, and hence will not be dealt with here. Suffice it to say that adequate doses of digitalis and moderate fluid and salt restriction form the basis of such treatment. Diuretics are useless and should be avoided because harm may be done.

Convulsions.—It is well to prepare for convulsions during the final stage by warning the relatives of their possibility and having readily available tongue depressors well wrapped in gauze to prevent injury to the tongue when they occur. Hypertonic glucose (50 per cent) given intravenously tends to lessen their frequency and severity. If they continue and cause great distress, sodium amytal (sodium iso-amyl ethyl barbiturate, Lilly) or pentobarbital (gr. iii) may be given intravenously.

Itching.—One of the most distressing symptoms of uremia is intense itching. Unless it is reduced or abolished, the patient is miserable. We employ pine tar ointment (U.S.P.), Obtundia cream applied freely to the skin, and ergotamine orally (1 mg. or 1/60 gr., three times a day).

Nausea and Vomiting.—These are among the most difficult symptoms to treat. They tend to be less severe if the electrolyte pattern of the blood is kept as normal as possible. Administration of glucose by vein also aids in preventing them. Moderate exercise and fresh air reduce them. Some patients find that sucking cracked ice is soothing. Bismuth subnitrate (0.65 gram) plus sodium bicarbonate (1.3 grams) may aid.

One of the most useful procedures is to insert into the rectum a capsule of sodium amytal, well lubricated and punched full of holes with the point of scissors.

The mouth should be kept clean with any pleasant antiseptic solution, and the lips should be well greased with cold cream.

Pallor.—It distresses the patient to be told how pale he looks. True it is that the pallor is often ghastly. It seems worth while to try to overcome this as much as possible by means of daily treatment with either direct sunlight or an ultraviolet lamp. It certainly bolsters the patient's morale.

It is often possible and certainly desirable by careful therapeutics to allow the patient to have normal social contacts and duties until within days or weeks of the final uremic coma or cardiac failure. If this has been accomplished, the physician has done well.

ABSTRACT

EATING FALSE MOREL IS UNSAFE DUE TO ITS VARYING TOXICITY

So-called mushroom is often poisonous though many consumers escape harm, author warns in reporting death

Even though the false morel, a type of so-called mushroom, has been eaten by many persons without harm, its poisonous properties are so variable that its consumption is unsafe, H. V. Hendricks, M.D., Kalkaska, Mich., warns in *The Journal of the American Medical Association* for April 27 in reporting a death due to eating this plant.

"Reports of poisoning by 'mushrooms' are seen in the daily press from time to time," he points out. "Of those occurring in the spring of the year, at least in the Northern states, it is quite likely that some are due to the false morel."

The variability in the poisonous properties of this plant is illustrated by the fact that several persons besides the woman whose death Dr. Hendricks reports ate of the false morels without any ill effects. The only other person affected was the daughter of the patient, who became ill with vomiting but recovered the next day.

The principal danger from the plant seems to be that a considerable number of persons have eaten it with impunity, inasmuch as actual confusion between the true and the false morel can hardly occur. The false morel, called also the lorchel, consists of a bay-red cap of irregular form, the general form of which reminds one of a mass of dough which has overrisen and has flowed out of its container. The true morel is buff yellow to brown or darker, and the caps are more or less uniform, being conical or ovoid, while their surfaces have a more spongy appearance.

EDUCATION OF THE PUBLIC ON MEDICAL SUBJECTS

W. D. GATCH, M.D.
INDIANAPOLIS

Education is generally regarded as the most important part of public health work. The content of this must be reliable. Ignorance of medical facts is probably less dangerous than misinformation about them. In recent years there has been no lack of effort to inform the public on every medical topic from painless childbirth to euthanasia. This instruction has been given by the schools, by public health officials, by novelists, scenario-writers and commercial advertisers, as well as by the organized medical profession. The effects on the people of the information so given needs careful investigation. I shall consider two effects which are obviously bad:

First: the public has been led to believe that medical science is a good deal more potent than it really is.

This is one cause of the present rumpus over medical care. The most absurd statements have been made in regard to the possibility of controlling cancer, maternal mortality, insanity and the frequency of sickness in general. Every well informed physician knows that the expectations these create cannot be fulfilled.

The results of the propaganda for the control of cancer and insanity furnish the best illustration of the truth of the foregoing statement. Despite the intensive education of the public on the early diagnosis of cancer and despite its treatment by the most modern methods, the death rate therefrom remains unchanged. Of course, the realization of this fact should not make us forget that proper treatment can do immense good to every victim of cancer. It can lengthen life in most cases, save life in many cases, and always relieve suffering, but to claim more than this is dangerous to the medical profession and harmful to the cause of public health. The people have come to believe that cancer is always curable in its early stage. Therefore, they blame the physician for failure to cure what they regard as an early case of cancer.

Another bad effect of the propaganda on cancer is to excite, mostly by suggestion, an intense fear of this disease; on this fear the cancer quack flourishes. Death from the common forms of cancer, treated by modern methods, is no more dreadful than death from many other diseases. The public needs to be reassured on this matter. The dread of cancer is in part due to the horrible conditions, formerly seen, caused by neglected or improperly treated cancer of the face and breast. These are now easily preventable. The idea that cancer is always painful causes many women with cancer of the breast to avoid treatment until the growth is far advanced or inoperable. They need to be told that cancer of the breast in its early stages is painless.

The propaganda for the control of mental disease has been nearly as intensive as that on cancer, and a candid estimate of what it has accomplished is no more encouraging. Insanity is no less prevalent now than it was before the war to prevent it was started. It seems that even prevention of procreation by persons liable to have mentally deranged offspring would not be effective, and this is apart from the practical difficulty of executing the plan. By the eradication of syphilis we could prevent many cases of insanity and some more could be avoided by preventing injuries to the head, but beyond this—what? It is doubtful if we possess any method of mental healing which is capable of preventing the major psychoses. This statement must not be regarded as an attack on modern psychiatry which is capable of doing immense good. Psychiatry has come to regard as its main study not the major psychoses, but the inter-relations of mind and body in people who are not insane.

Enthusiasts on reforming medical practice have asserted that the United States loses a vast amount of money every year because of preventable illness. A large part, perhaps half, of the sickness which incapacitates people for work is caused by respiratory infection. The idea that at present much can be done to prevent this is unfounded. Physicians and their families have colds and influenza. Epidemics of these diseases afflict groups of people living under apparently ideal conditions of hygiene and medical care.

Dazzled by the spectacular achievements of medicine, the public and many physicians have not considered its limitations. They should bear in mind that its chief triumphs have been in the field of preventive medicine where it has controlled infectious diseases and lowered infant mortality. It has not been so successful in the control of the degenerative diseases of middle life and old age. It is probable that a man of forty has today no better chance of living to the age of eighty than had a man of forty living one hundred years ago. Whatever benefit medicine has brought to the middle-aged has been balanced by the increased peril of modern life. The automobile kills as many as sulfapyridine saves.

The campaign against tuberculosis has been very successful for the reasons that the cause of the disease and its manner of dissemination are known. If we knew as little about it as we know about cancer, insanity, and influenza, we could never have controlled it. We do know as much about syphilis as we know about tuberculosis, and there is every reason to believe that we can ultimately eliminate it.

The foregoing arguments make it clear that we cannot control any disease until we know its cause

and the manner of its propagation; also, that we do not as yet possess this knowledge about many diseases which are among the commonest causes of death and disability.

Second: Medical propaganda has made the people too profoundly concerned about health.

Medical propaganda has made multitudes of hypochondriacs, obsessed by morbid fears of cancer, high blood pressure, food, birth, death, and even life! Nature has wisely left the guidance of the vegetative functions of the body to appetite and instinct. Habitual thought about such processes as circulation and digestion deranges them and may ultimately cause organic disease. He who fears too much for his health will lose it.

The effort to inform the people on every symptom and result of disease is certain to harm them. They cannot possibly understand the instruction even if it is honestly and conscientiously given. It breeds in them a morbid interest in disease and makes of them patients who are difficult to manage. It often causes them to demand expensive and unnecessary diagnostic study. It makes every patient an amateur doctor.

CONCLUSIONS

1. Propaganda on health has created morbid fears of disease which physicians, public health officers, and teachers should unite to dispel.
2. It is impossible to teach the details of medicine to the public, and the results of the attempt have been bad.
3. The organized medical profession is the only body capable of giving authoritative and useful information on health subjects to the public. It should devote more attention to this important matter. Part of this information should be a frank statement of the present limitations of medical science.

CHRONIC GONORRHEA

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A German professor once said, "When I die, and to heaven have gone, I am sure that my penalty shall be: Doctor, what have you done about the shreds in the urine?" He was frankly admitting his failure to cure chronic gonorrhea in spite of his earnest efforts to do so. The disease has offered stubborn resistance to the attacks of scientists since the earliest recorded medical literature.

The treatment of chronic gonorrhea is one of the major responsibilities of the medical profession. Physicians, including urologists, who should be best prepared to meet such a responsibility, have hesitated to allow their names to be associated with the problem. They have chosen, rather, to devote their time to publicizing the more spectacular surgical procedures. Such men are partially to blame for the apparent indifference of both the public and the profession. This attitude should be changed. Educational efforts of the United States Public Health Association, and more recently the American Neisserian Medical Association, are stimulating wide interest.

The public is becoming informed and is demanding scientific treatment. Medicine is responding by providing such treatment.

At the present time, practically all cases can be cured. We are not ready to make the statement that *all* cases can be cured for, if the disease has become systemic, irreparable sequelae may exist. Since the use of sulfanilamide has become general, the patient with chronic infection may present a difficult diagnostic problem.

The chemical causes symptoms not usually seen in this disease. The drug promises much, but may be dangerous. The actions of sulfanilamide and sulfapyridine are not yet thoroughly understood, but we regard them as bacteriostatics which may shorten the course of the disease, thus permitting us to attack the foci earlier and more often. Also we believe that the drugs may prevent many serious complications if used intelligently with proper medical supervision.

Proper treatment of chronic gonorrhea is based upon a thorough understanding of the following subjects: first, the anatomy; second, the pathology; third, the bacteriology; fourth, the chemotherapy; and last, the surgical principles of drainage of the urogenital tract.

Anatomically the urethra is divided. The pendulous portion is five inches in length, the bulbous is two inches, the membranous is one-half inch, and the prostatic portion is one inch long. Draining into the pendulous urethra are numerous periurethral glands. In the bulbous urethra are found the orifices of the ducts of the bulbo-urethral or Cowper's glands which lie in the urogenital diaphragm. The membranous urethra is the most vulnerable to injury by instrumentation. The prostatic urethra contains the orifices of many prostatic ducts. There is one duct for each two lobules of the glands. The verumontanum stands prominently in this portion of the urethra, and surrounds the utricle. Just within or lateral to the margin of the utricle are found the orifices of the ejaculatory ducts, through which infection may extend to the seminal vesicles, vasa deferentia and epididymitides.

The median raphe on the ventral surface of the skin is sometimes infected. Close to the meatus the epithelium is stratified squamous, and is more

resistant to irritants than the transitional epithelium of the prostatic urethra close to the bladder. Elsewhere, the urethra is lined with columnar epithelium.

A knowledge of the clinical pathology of the disease will enable one to anticipate and recognize seminal vesiculitis, prostatitis, vasitis and epididymitis. Too often the term epididymo-orchitis is used when the pathological process is really epididymitis. Tumor within the tunica vaginalis may be due to tertiary syphilis and is readily recognized by those familiar with the pathology of the venereal diseases, but has been surgically removed by the untrained surgeon.

Errors in diagnosis of chronic gonorrhea will be avoided by using the microscope. The smear may show not only gonococci, but other organisms. Colon bacilli suggest pyelitis. Spermatozoa may be present in a discharge not infectious but because of dysfunction of the seminal vesicle. Pus may be due to genital infections complicating systemic disease, notably influenza.

In choosing a drug to be used locally in the urethra and adnexa, one should consider not only its germicidal action but also its disadvantages. It may be too irritating. It may coagulate and fail to penetrate. We have observed that swollen periurethral mucous glands are more common following the use of certain types of injections than with others. Patients dislike drugs which stain and we agree with them.

Incisional drainage should be avoided if possible. Blood stream infections may follow. However, if the infection penetrates the wall of the genital tract at any point and forms an abscess adjacent to the channel, surgical drainage is usually the best treatment and is often imperative.

For illustrative purposes, the diagnosis and treatment of the usual case of chronic gonorrhea and two of the common complications will be discussed.

When a patient consults us, we should take a careful history and record it. Information should include complaint, symptoms, duration of the disease, and previous treatment. Next, we examine the external genitalia by inspection and palpation. If a discharge can be expressed from the urethra, it is examined microscopically for pus, organisms and epithelial cells. In chronic infections, more gonococci are extracellular. If many epithelial cells are seen, we think of stricture, ulcer, and intraurethral chancre. If only a few pus cells are found, one feels free to explore the urethra with instruments. Since existing stricture is often the cause of chronicity, one must often calibrate the urethra even though profuse discharge is present. The patient is then asked to void a part of the urine in two glasses. If the second glass is clear this specimen is examined for evidence of upper urinary tract pathology. Per rectum the prostate gland is examined, noting size, shape, consistency, and any variation from the normal. The seminal vesicles are then palpated and emptied.

If the patient has no urethral discharge, this examination will usually produce a specimen for microscopic study. The patient is again asked to void into a glass. There will be a sediment in the urine which should be diluted by the addition of tap water and observed by holding the glass container between the eye and a good source of light. This method of examining the contents of the prostate and seminal vesicles has been very useful to us in diagnosis. If the fluid contains much pus, rapid precipitation will occur. If there is very little or no pus, the prostatic debris will float. If there is no pathology, we find only a turbid fluid due to the presence of normal semen. If one follows the foregoing suggestions, routinely making a systematic examination, diagnosis will be easy and accurate.

Treatment of the ordinary chronic infection consists of prostatic massage on a full bladder, stripping of the seminal vesicles, and observing the specimen voided as stated above. Following this we instill two cc. of a germicidal solution. The germicide is instilled into the prostatic urethra if no sound is used, but if dilatation is done, the germicidal solution is injected into the urethra and forced ahead of the dilating sound. In this way the spread of infection by instrumentation is avoided.

A great deal can be said about the choice of a germicide. When Neisser discovered the gonococcus the story is told that he was asked how to cure the disease, now that the causative organism had been discovered. He is said to have replied that he had not discovered the cure but that the silver salts would probably be as good as anything.

The silver salts are not the best germicides available today. They are not germicidal in weak dilutions and they are too styptic in germicidal dilutions. Potassium permanganate solution, $KMnO_4$, is widely used for irrigations in the treatment of gonorrhea. This practice should be discontinued for the following reasons: It is not germicidal in commonly employed dilutions, and it is an oxidizing agent which may spread infection in the genital tract by manipulation just as hydrogen peroxide is believed to spread infection when introduced into fistulous tracts.

Extensive research on germicides has been done in the past twenty years. Further research has been done to determine the ideal germicide for local use in the genito-urinary tract. We have paralleled this work by practical application in our clinics. More than ten years ago I came to the conclusion that the aqueous solution of metaphen was the most effective. I have had no cause to regret this decision. The drug is easily obtained, inexpensive, non-irritating, and non-styptic in 1:5,000 solution, and is germicidal. We now use it from the renal pelvis to the external meatus whenever local injection is indicated for prophylaxis, before instrumentation, and for treatment. Mercurophen, oxycyanide of mercury and other mercurials may be used and are germicidal in weak dilutions.

In brief, the treatment of chronic gonorrhea in the male consists of massage and urethral dilatation to establish drainage and to gain access to the infection with a bactericide. Avoid trauma if possible. This treatment should be continued until no pus can be found microscopically and until the normal circulation of the genital tract is restored. Our standard of cure is a normal prostatic fluid, grossly and microscopically, absence of palpable swelling in the external genitalia, a urethra that will admit a 27F sound without pain or bleeding, and urine that contains no shreds.

In treating epididymitis we support the gonad by suspension sufficient to relieve tension on the vas. We improve drainage through the ampulla of the vas and the ejaculatory duct by massage, and instill the germicidal solution into the prostatic portion of the urethra after the obstructing plugs of pus have been expressed. We have found this method more satisfactory than the use of foreign protein injections, intravenous iodides or the more recently suggested autohemotherapy.

Prostatitis is treated early by gentle massage. We believe that huge prostatic abscesses are more apt to occur in the untreated cases. Certain teachers advise against treatment of the acute prostate; we urge active early treatment. Frequent evacuation of the prostatic ducts prevents abscess formation.

If the treatment described is carefully followed, the use of the endoscope is seldom necessary. The use of the instrument is necessary, however, if one hopes to become familiar with the anatomy and pathology of the urethra.

Treatment of chronic gonorrhea for the married man is hopeless unless the wife is also examined and actively treated. Most cases have infected wives and we insist that they, too, deserve active treatment. Unless they are receiving adequate treatment, we routinely request their physicians to order the following prescription to be used as a douche:

℞

Mercuric chloride		
Ammonium chloride	aa	6.0
Coloretur Auranti		
Aqua qs ad		250.0

M. Sig. 4 cc. to 500 cc. locally by douche as directed.

The douche is miscible with vaginal secretions and renders the vaginal flora less dangerous.

The widespread use of water, salt, soda solutions, and antiseptic douches is hard to understand and is evidence of the neglect of genital tract infections in women. It is so easy to make a microscopic examination and to prescribe measures to control such infections and, in doubtful cases, to secure prophylaxis. Her cure should be pronounced by a competent physician.

There is no quick or magic cure for chronic gonorrhea, but there is a positive cure, based upon sound fundamental principles of diagnosis and treatment.

Any physician seriously interested in the cure of chronic gonorrhea can succeed by this method of treatment.

The fight against venereal diseases is commendable, and anyone who gives part time, or his entire time to the cause should be encouraged. Results should justify more frequent interchange of ideas in medical schools, medical societies and medical literature.

708 UNDERWRITERS BLDG.

ABSTRACT

THE CASE FOR PRIVATE PRACTICE

"In the issue for May of *Nation's Business* appears a special supplement entitled 'The Case for Private Medicine,'" *The Journal of the American Medical Association* for May 11 says.

"It is a twenty-four page story of the campaign that has been waged in recent years to force the medical profession into regimentation, and of the manner in which this campaign has been combated by the medical profession. It discusses also the state of health of the nation, and the reasons why medicine in a democracy should not be submitted to bureaucratic control. The supplement called 'The Case for Private Medicine' is the fifth of a series which this magazine has been making available, the previous supplements covering 'Insurance,' 'Investment Banking,' 'Power and Light' and 'Distribution.' Reprints of the pamphlets covering 'Distribution' and 'The Case for Private Medicine' are available through the *Nation's Business* at 10 cents a copy or $6 a hundred, which just about covers the cost of printing. Every physician should become familiar with this item; it may be had by writing to the *Nation's Business*, United States Chamber of Commerce Building, Washington, D. C. This periodical, which, incidentally, is the official organ of the Chamber of Commerce of the United States, itself circulates 350,000 copies to members of that organization.

"In presenting this article the *Nation's Business* provides first an adequate statement under the title 'Give the Doctors a Hand,' pointing out that it is the duty of commerce to aid medicine in resisting the march of collectivism. The article as a whole is prefaced by the statement made by Prince Otto von Bismarck, the father of social insurance, who said:

"'A beginning must be made with the task of reconciling the laboring classes with the State. Whoever has a pension assured to him in his old age is much more contented and easy to manage than the man who has no such prospect. Compare a servant in a private house and one attached to a Government office or to the Court; the latter, because he looks forward to a pension, will put up with a great deal more. . . .'

"There are also numerous illustrations and a wide variety of quotations from writings that have been published on the subject. Every one will find this the most interesting document that has yet been made available in medicine's campaign for freedom."

THE RELATIONSHIPS BETWEEN THE STEROLS, BILE ACIDS, SEX HORMONES, and VITAMIN D*

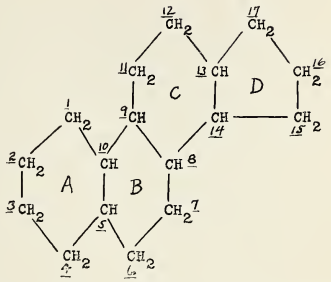
C. J. KLEMME, Ph.D.†
LAFAYETTE

During the past fifteen years methods of analysis and synthesis in organic chemistry have been developed to such an extent that chemists have been able to uncover one of the most amazing groups of naturally occurring substances ever encountered in living matter. The sterols, bile acids, certain of the sex hormones, some cardiac poisons; the vitamins D, and hormones of the adrenal cortex all belong to this family of chemically related substances. Sobotka[1] has coined the terms "sterids" for this group of sterols and steroids or sterol-like compounds just as Bloor[2] suggested the convenient term "lipids" to include the fats and lipoids.

In no other group of naturally occurring and vital substances do we find such diversity of occurrences and physiological actions. When we consider the carbohydrates, fats, and proteins, we find their chemistry, occurrence, and physiological functions restricted to rather narrow fields. The vitamins differ radically from each other in both chemical constitution and action upon the body. The sole claim of the vitamins to be classed together as a group is the fact that the absence of one or more of them in the diet leads to what we call deficiency diseases. The same reason might easily be authority for including in the vitamin group such substances as the indispensable amino acids, certain essential fatty acids, and various other substances, the absence of which from the diet undoubtedly leads to deficiencies.

Among the sterids, however, we find a large number of compounds which are of extremely close chemical relationship; they are found everywhere in living matter, and yet the individual members have astonishingly diversified roles in the animal organism. Certain ones may act as estrogenic, luteinizing, or androgenic hormones, others rule over the sodium-potassium balance of the body, another group functions as antirachitic agents, and while these are maintaining the normal processes of life and health, still another group steps into the picture as violent cardiac poisons. Some even attribute to certain black sheep of the family the possibility of causing cancer.

All these substances have a chemical nucleus in common, namely, the *cyclo*-pentano-perhydro-phenanthrene system of rings. It is possible to modify this system in several ways to obtain an almost infinite variety of compounds. First, we could



introduce various groups, such as hydroxyl, keto, carboxyl, alkyl, etc., into any one of the seventeen possible positions of the system, to say nothing of modifying the eight to ten carbon atoms of the side-chain which so commonly occurs on position 17. Second, we could introduce double bonds into one or more of the twenty possible positions of the ring system, again not to mention the side-chain at position 17. Third, we have an enormous number of possibilities because of stereoisomerism. This curious phenomenon of carbon compounds and chronic headache of the synthetic chemist has a most startling effect on the physiological behavior of compounds, as we well know, and in the sterids we find that there is no exception. We are, unfortunately, unable to predict the action of a compound on the basis of its stereochemistry, and the only way we can find the answer is to try, and try, and try again.

One further remarkable fact about the sterids is the ease with which living matter is able to synthesize the complex ring structure. Ordinarily in the past we have thought of most syntheses occurring in the animal body as processes concerned with the production of relatively simple, acylic or open chain compounds. Even the simple amino acids which contain ring structures, such as phenylalanine, tryptophane, histidine, etc., are among the indispensable group[3, 4] and must be supplied in the diet because the animal organism is incapable of synthesizing even such simple ring structures. On the other hand, it has been shown[5] that mice fed on a low sterol diet are capable of synthesizing an average of 1.8 mg. of cholesterol daily. Moreover, it was proved that the cholesterol thus formed was produced from numerous units of small molecular weight by feeding the animals

* Presented before the Northern Tri-State Medical Society, April 9, at Battle Creek, Mich.

† Professor of Pharmaceutical Chemistry, Purdue University.

[1] Sobotka, H.: The Chemistry of the Sterids, Williams & Wilkins Co., 1938, p. v.

[2] Bloor, W. R.: Chem. Reviews, **2**, 243 (1925-26).

[3] Rose, W. C.: Science, **86**, 298 (1937).

[4] Rose, W. C.: Physiol. Reviews, **18**, 109 (1938).

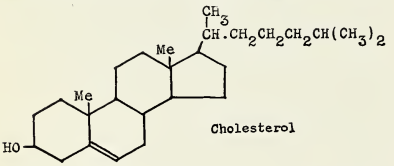
[5] Schoenheimer, R.: J. Biol. Chem., **103**, 439 (1933).

foods which were tagged with deuterium and then showing that the cholesterol formed contained deuterium.[6] Hence there can be no doubt about the ability of the animal organism to synthesize the complex ring structure of the sterids.

In discussing the sterids in this paper, the order followed will be to start with the sterols which have an eight to ten carbon atom chain at position 17, and then progress with the groups in which we find this side-chain progressively modified and shortened until it completely disappears. Within each of these groups slight variations in other parts of the molecule which affect physiological behavior will be considered.

Of the sterols, cholesterol is the most familiar and has been known longer than any other. Several individuals are credited with the discovery of this substance but the earliest record we have giving a hint that cholesterol was a chemical entity is that of Valisneri in 1733.[7] In spite of its early discovery, it was not until 1932, almost two hundred years, that Windaus postulated the chemical structure which we now accept for cholesterol.[8] The first sterol to be differentiated from cholesterol was identified by Flint[9] in 1862 as occurring in human feces, and about the same time a sterol was discovered in plants. It was thought to be identical with cholesterol[10] but was soon recognized as a different entity to which the name "phytosterol" was given.[11] In rapid succession other plant sterols were discovered, the most important of which are stigmasterol and ergosterol.

We may now examine these sterols and compare their behaviors with their structures.

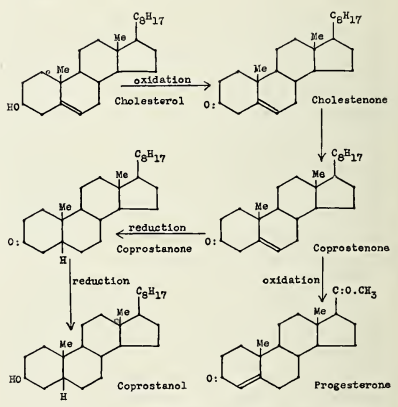


Cholesterol

Cholesterol has an eight carbon atom side-chain which is completely saturated, a double bond at position 5, and a hydroxyl group on position 3. These three characteristic features of the molecule impart to it the properties exhibited by the substance, and it is the alteration of them that gives different physiological behaviors. The site of its formation in the body is unknown, nor do we know where certain transformations in the molecule occur in the body and which give rise apparently to such substances as bile acids, pregnandiol, and androsterone. Its physiological functions are almost as obscure as its origin. It appears to be essential in the transport and possibly the metabolism of the fatty acids. Neutral fat usually is incapable of assuming the extremely finely divided state necessary for invasion of the cellular structures while phospholipids and cholesterol esters, due to their peculiar colloidal properties, are ideal for the transport of fatty acids and the deposition of neutral fat in the tissues.[12]

Cholesterol has a profound effect on the colloidal nature of the protoplasm and thus plays an important part in a variety of immunological processes. For example it has an antagonistic influence on the action of lecithin in certain hemolytic systems. Since it is capable of precipitating the neutral saponins, it has a detoxifying action on these hemolytic poisons.

There is evidence, based upon chemical theory and some experimental work, that cholesterol is the precursor of other sterids elaborated by the body. Coprostanol and cholestanol, *cis-* and *trans-*epimers respectively, are dihydro or reductions products of cholesterol. As mentioned before, coprostanol was discovered by Flint[9] and recognized later by Bondzynski and Humnicki[13] as a product formed by the bacterial reduction of cholesterol in the intestinal tract. Nevertheless, the *in vitro* evidence for this is lacking.[14] [15] Accordingly, Rosenheim, et al.[16] [17] proposed that coprostanol is formed in the intestines, not by direct reduction of cholesterol, but from coprostenone and coprostanone which in turn can be accounted for by the oxidation of the hydroxyl group at position 3 of cholesterol, and hydrogenation of the double bond at position 5:



[6] Schoenheimer, R., Ritterberg, D., Graff, M.: J. Biol. Chem., **111**, 183 (1935).

[7] Valisneri, A.: Opere fisico-mediche, **3**, 594 (1733) Venice.

[8] Windaus, A.: Z. physiol. Chem., **213**, 147 (1932).

[9] Flint, A., Jr.: Am. Jour. Med. Sci., **44**, 305 (1862).

[10] Beneke, Gallenbestandt. in thierischen und pflanzlichen Organismen. Thesis Giessen cf. Ann., **122**, 249 (1862).

[11] Hesse, O.: Ann. **192**, 175 (1878); **211**, 283 (1882).

[12] Bloor, W. R.: J. Biol. Chem., **49**, 201 (1921).

[13] St. von Bondzynski; Humnicki, V.: Z. physiol. Chem., **22**, 396 (1897).

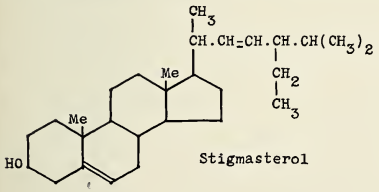
[14] Bischoff, G.: Biochem. Z., **222**, 211 (1930).

[15] Dam, H.: Biochem. J., **28**, 280 (1934).

This theory also accounts for the changes in steric configuration necessary for the transformation of cholesterol to bile acids, pregnandiol, progesterone, and androsterone. In order to account for the formation of these substances, it must be postulated that the organism is capable of such transformations. Some experimental evidence in support of this theory has been adduced by Rosenheim,[17] Schoenheimer,[6] and Evans.[18]

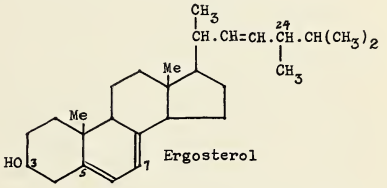
Considering cholesterol from a pathological viewpoint, its occurrence in gallstones is quite familiar. It is unusually prevalent in organs undergoing fatty degeneration. Hypercholesteremia has long been regarded as an important symptom of biliary obstruction. However, in conditions marked by low blood protein content, such as nephrosis, anemia, etc., extremely large amounts of cholesterol are found in the blood, sometimes running as high as 2,000 mg. percent. Hypercholesteremia is also frequently encountered in diabetes mellitus and xanthomatosis. Thus, while there are accurate methods for the determination of blood cholesterol, it is not always significant in a specific way. Deposition of cholesterol and its esters occurs in necrotic bone areas, chiefly the skull, and is the characteristic feature of Hand-Schueller-Christian's disease. Accumulation of cholesterol, free and combined, is accompanied by a deposition of phosphatids in the liver, spleen, bone-marrow, and other tissues in Hiemann-Pick's disease. The most common pathological condition of cholesterol deposition is atherosclerosis. While such deposits can be caused experimentally in rabbits by feeding cholesterol, the ingestion of it will not cause the disease. Even though feeding cholesterol will add to its deposition in general cholesteroses, there is no evidence to show that such excessive exogenous origin has any influence on its accumulation in either the biliary tract or the arterial wall. The cause of the accumulation in these various conditions is as yet quite obscure.

The study of stigmasterol, since it is a plant sterol, involves no problems of metabolism. The chief interest in this substance lies in the fact that it is the starting point in the commercial production of progesterone. It is of wide-spread occurrence in the plant kingdom but the main source is the soy bean. Its structure is such that it can be converted to progesterone by a series of fourteen chemical processes. The fact that the double bond at position 5 will add bromine much more readily than will the one in the side-chain makes this process possible.[19] [20]



Stigmasterol

Ergosterol, though a plant sterol, becomes of importance in animal metabolism because of its transformation by ultraviolet irradiation to vitamin D_2. Its name is derived from the fact that it was first isolated from ergot, but our commercial source is yeast. Examination of its structure reveals certain characteristics which make its conversion to an antirachitic substance possible.



Ergosterol

It is noteworthy that ergosterol differs from stigmasterol in two particulars: first, a double bond in position 7, and second, a methyl group on C-24 in place of the ethyl group in stigmasterol. This latter difference causes some surprise as far as provitamin properties are concerned, and will be mentioned again later.

To digress briefly, the first authentic use of cod liver oil as a therapeutic agent dates back to 1772. Robert Darbey, house surgeon and apothecary to the Manchester Infirmary, replied in a letter dated February 12, 1782, to an inquiry from the famous London clinician, Thomas Percival, as follows:

> "About ten years since, an accidental circumstance discovered to us a remedy, which has been used with the greatest success . . . but is very little known, in any country, except Lancashire. It is the cod, or ling liver oil."[21]

The names of Mellanby, McCallum, Sherman, and Pappenheimer are indelibly carved in the annals of medicine for their painstaking work on rickets and the antirachitic effects of fish liver oils. Then came the startling pronouncements by Huldschinsky[22] in 1919, and confirmation by Hess and Unger[23] in 1921 that ultraviolet light had

[16] Rosenheim, O., Starling, W. W.: Chem. Ind., **52**, 1056 (1933).

[17] Rosenheim, O., Webster, T. A.: Nature, **136**, 474 (1935).

[18] Evans, E. A., Jr.: J. Biol. Chem., **115**, 435 (1936).

[19] Butenandt, A., Westphal, U.: Ber., **67**, 2085 (1934).

[20] Fernholtz, E., ibid., **67**, 2027 (1934).

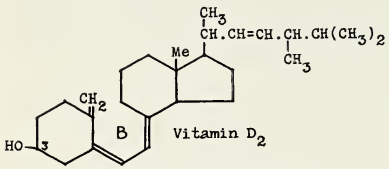
[21] T. Percival's Essays., vol. ii, 4th Ed. (London 1789), p. 359.

[22] Huldschinsky, K.: Deut. med. Wochschr., **45**, 712 (1919).

[23] Hess, A. F., Unger, L. J.: Am. J. Diseases Children, **22**, 186 (1921).

antirachitic effects. These two widely divergent observations were brought to convergence by Steenbock and Black[24] when they showed that foods irradiated by ultraviolet light carried protection against rickets. The frantic search which followed, in the endeavor to locate the provitamin D, led to ergosterol.

Ultraviolet irradiation of ergosterol produces a series of six substances, only one of which is antirachitic. This active substance is known as vitamin D_2 or calciferol.

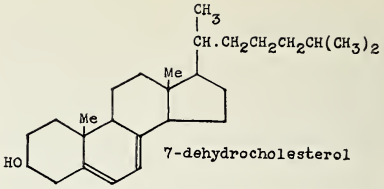


Vitamin D_2

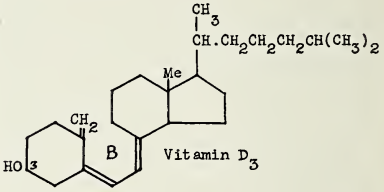
We note from its structure that it has (a) the hydroxyl group at 3, (b) an opening in ring B, (c) three conjugated double bonds in a closely limited position. These features are essential for antirachitic activity as is shown by the fact that the closely allied irradiation products fail entirely to function as antirachitic agents. It is, however, worthy of mention that any of these substances, tachysterol and toxisterol, having the opening in ring B exhibit the same toxic properties as vitamin D_2.

The elucidation of the ergosterol structure and its transformation to vitamin D_2 led to a search for other provitamin substances. This search was spurred by the discovery that while vitamin D_2 was an efficient antirachitic agent for rats, it was almost ineffective when administered to chicks, thus indicating that irradiated ergosterol was not identical with the antirachitic agent of fishliver oils. Moreover, it had been shown that children require about three rat units of calciferol (vitamin D_2) to equal the effect of one rat unit of cod liver oil. It was found by Windaus et al[25] that 7-dehydrocholesterol could be changed by irradiation to an antirachitic substance which was later shown to be identical with the active substance of tuna liver oil.[26] [27] It is effective in the prevention of rickets in chicks, having the same order of effectiveness as equivalent amounts of cod liver oil, but is only about one half as effective in rats.

The irradiated 7-dehydrocholesterol was designated as vitamin D_3, and the relationship of these compounds to ergosterol and vitamin D_2 is shown by their structures.



7-dehydrocholesterol



Vitamin D_3

Here again we note the same characteristics of the molecule which appear to be essential for antirachitic activity as in vitamin D_2, the striking difference between these two vitamins being found in the side-chain. This would lead one to believe that the constitution of the side-chain might modify the activity of the substance to some extent since we have this comparison:

1 mg. Vitamin D_2 contains 40,000 International Rat Units,

1 mg. Vitamin D_3 contains 24,000 International Rat Units.

While modification of the side-chain seems to cut the activity of vitamin D_3 to a little more than half that of vitamin D_2, we must not overlook the fact that the latter is much less effective in children and in chicks than the former. Quite obviously, as in the case of many drugs, the effectiveness of these vitamins depends not entirely upon structure, but upon the organism to which they are administered. More startling, however, are the totally unexpected results obtained from irradiated 7-dehydrostigmasterol which differs from irradiated ergosterol by only one methyl group in the side-chain, and yet it has little, if any, antirachitic potency.[28]

The examination of the cardiac poisons must necessarily be brief because of a lack of definite and extensive knowledge concerning them. For ages, plants and extracts of plants containing heart poisons have been used in medicine, as arrow and ordeal poisons. Digitalis, strophanthus, ouabain, squill, convallaria, and many other drugs of similar nature are familiar in materia medica. The cardiac principles of these drugs are glycosides which, upon hydrolysis, yield the active aglycones, generally referred to as "genins." While the chemistry of the genins needs much in the

[24] Steenbock, H., Black, A.: J. Biol. Chem., **61**, 405 (1924).

[25] Windaus, A., Lettre, H., Schenck, F.: Ann., **520**, 98 (1935).

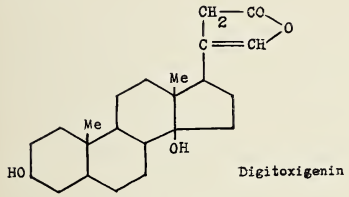
[26] Windaus, A., Schenck, F., von Werder, F.: Z. physiol. Chem., **241**, 100 (1936).

[27] Brockmann, H.: ibid., **241**, 104 (1936).

[28] Linsert, O., ibid., **241**, 125 (1936).

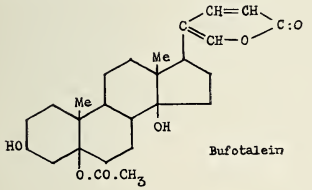
way of elucidation, it is worthwhile and promising to note a few of the accomplishments in this field of the sterids.

The genins of the cardiac glycosides are sterids which differ from cholesterol chiefly by having a completely saturated ring system, two or more hydroxyl groups attached to the ring system and finally but most important, the side-chain at position 17 is modified by oxidation and cyclization forming lactone structures. This seems to be characteristic of the cardiac poisons belonging to this class. It is exemplified in the structure of digitoxigenin:



Digitoxigenin

Cardiac poisons of a similar nature occur in the animal kingdom. Several varieties of Bufo, the toad, secrete poisonous substances through the skin. The dried poison of the Chinese toad is used as a medicine in China under the name of "Ch'-ansu." These secretions contain a series of poisons designated by the general term "bufotoxins." The pharmacology of these substances has been thoroughly studied by Chen and Chen, but our knowledge concerning the chemistry of them is woefully slim. Upon hydrolysis they yield various active genins, suberic acid, $HOOC.(CH_2)_6$-COOH, and arginine. Wieland and Hesse[29] have proposed a structure for one of the best known of the toad genins, bufotalein:



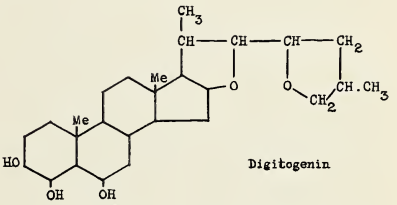
Bufotalein

Again we find a lactone ring structure attached to position 17 as in the case of the digitalis heart poisons.

Some principles of other poisons of the animal kingdom such as snake venoms and bee poison have been suggested as being of steroid structure[30] but the gross poisons are such complex mixtures that they have not been sufficiently separated into components and the latter purified to recognize their chemical nature.

While, as emphasized before, our knowledge concerning the chemistry of these heart poisons is just at the beginning, it is hoped that intensive investigation of them and resulting synthetic methods may place in the hands of the physician more definite and reliable substances for the treatment of certain cardiac disorders.

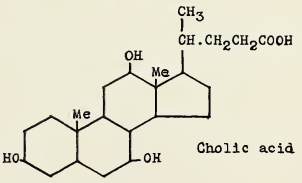
Closely related chemically to the cardiac poisons are the genins of the neutral saponins, but physiologically their actions are widely different. The neutral saponins have no action upon the heart, but like the acid saponins, which are of an entirely different chemical nature, they are extremely active in lowering surface tension and have a powerful hemolytic effect on erythrocytes. Studies by Jacobs and Simpson[31] and by Tschesche[32] led to the postulation of the following structure for digitogenin, a typical genin of the neutral saponins:



Digitogenin

In this compound the side-chain has been transformed into two ether rings which should cause the compound to behave quite differently than the cardiac poisons with their lactone rings and such is the case.

Next, and of more immediate practical interest, is a study of the bile acids. In this group of compounds the chemical structure is similar to that of the cardiac poison and neutral saponin steroids in having a saturated ring system and a varying number of hydroxyl groups attached to it. However, the side-chain at position 17 is appar-



Cholic acid

[29] Wieland, H., Hesse, G.: Ann., **517**, 22 (1935).

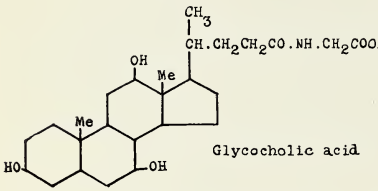
[30] Flury, F., in Bethe & Bergmann, Handbuch d. Physiol., vol. 13, 102 (1926).

[31] Jacobs, W. A., Simpson, J. C. E.: J. A. C. S., **56**, 1424 (1934).

[32] Tschesche, R., Hagedorn, A.: Ber., **69**, 793 (1935).

ently invariable. Cholic acid (3:7:12 trihydroxy cholanic acid) is a typical example of this group. (See formula on page 353.)

Lithocholic acid (3 hydroxy cholanic acid), deoxycholic acid (3:12 dihydroxy cholanic acid), and various isomers of the latter have been identified as occurring in bile; and, in their natural state, these acids are conjugated by a peptide linkage with glycine (NH_2CH_2COOH) or taurine ($NH_2CH_2CH_2SO_3H$). These conjugated bile acids, glycocholic acid and taurocholic acid, are much more soluble than the simple steroid acids, a highly desirable property from the physiological point of view. Glycocholic acid has the structure:



Glycocholic acid

The formation of these substances in the body is, like that of cholesterol, a mystery. As mentioned earlier, cholesterol apparently cannot be the direct precursor of the bile acids because of stereochemical considerations. There seems to be little, if any, evidence pointing to the transformation of cholesterol to bile acids. Feeding of the former does not increase bile salt production. On the other hand, feeding of coprostenol, which is of the *cis*-decalin configuration of the bile acids, caused an increase in the production of bile salts, but the hitch in this experiment is that the feeding of 1.5 gm. of coprostenol caused an observed increase of 4.5 gm. of bile salts, thus suggesting a cholagogic action rather than a transformation of substances. Enderlin, Tannhauser, and Jenke conclude from their work that the formation of bile acids from cholesterol, although not to be excluded, is not supported by convincing evidence.[33]

While the clinical study of bile acid function has not fared well due to the lack of adequate laboratory methods for their determination, the properties of these substances offer a basis upon which interpretation of function can be made. The outstanding properties of the bile acids are: first, extreme surface activity; and second, the ability to form coordination or molecular compounds with many types of other substances. The first property is, of course, responsible for the extreme ease with which the bile salts emulsify fats, their hemolytic action, and the operation of the "Hay test," used to detect their presence in urine. It is difficult, if not impossible, to say just how far this property extends the physiological usefulness of the bile salts.

The ability of certain bile acids to form molecular compounds is remarkable. Deoxycholic acid combines with such substances as fatty acids, alcohols, phenols, ketones (camphor), and hydrocarbons (naphthalene) in molecular ratios of 1:2, 1:3, 1:4, 1:6, or 1:8 depending on the size and shape of the prosthetic molecule. These substances are known as "choleic acids."[34 35 36] Choleic acid, isolated from biles, consists of about 92 percent deoxycholic acid and 8 percent fatty acid. The alkali salts of choleic acids are water soluble, thus providing a means of transporting water insoluble substances into the tissues.

The significance of the choleic acids in intestinal absorption is obvious. This principle aids greatly in the explanation of diffusion of the fats from the intestinal lumen into the lacteals and thence into the lymphatic ducts. In addition to the emulsifying power of the bile acids, they exert a very noticeable catalytic influence on the saponification of fats by the pancreatic lipase.

The choleic acid principle is the basis of certain therapeutic applications. It apparently influences the absorption of such materials as the fat soluble vitamins, the steroid sex hormones, various drugs, etc. The formation of choleic acids is probably responsible for the absorption of strychnine which might otherwise remain insoluble in the digestive tract. Lipid soluble substances, containing a high percentage of iodine for use as diagnostic opaques, and certain lipid soluble organic mercurials are directed to the gall bladder by their bile-affinity.

It has been noted that there is a difference in the abilities of dextro- and levo-rotatory forms of the same chemical compound to form molecular compounds with deoxycholic acid. This, then, may be one of the bodily mechanisms whereby the organism selects a physiologically utilizable substance and separates it from its enantiomorph. It has also been shown that deoxycholic acid has an enolizing influence on tautomeric compounds. Apparently the *enol* form produces a more stable combination or combines more rapidly with the bile acids than does the *keto*. As an example, when acetoacetic ester combines with deoxycholic acid to form a choleic acid, it is completely changed to the *enol* modification even though this form normally makes up only 7 percent of the *enol-keto* equilibrium mixture. This effect may be of significance in the utilization of fatty acids by *beta*-oxidation through the intermediary formation of an enolizable *beta*-keto acid.[37 38]

[33] Enderlen, C., Tannhauser, S. J., Jenke, M., in Friedmann, Sterols and Related Compounds, Cambridge (1935), p. 32.

[34] Wieland, H., Sorge, H.: Z. physiol. Chem., **96**, 1 (1916).

[35] Rheinbolt, H. et al.: Ann., **451**, 256 (1926); **473**, 249 (1929); Z. physiol. Chem., **180**, 180 (1928); **184**, 219 (1929).

[36] Sobotka, H., Goldberg, A.: Biochem. J., **26**, 555, 905 (1932).

[37] Sobotka, H., Kahn, J.: ibid., **26**, 898 (1932); Ber., **65**, 227 (1932).

[38] Fowweather, F. S.: Biochem. J., **26**, 165 (1932).

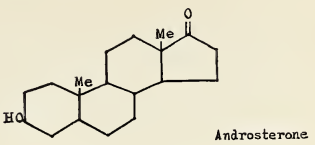
This enolizing effect of the bile acids has been used as an explanation of the "direct" and "indirect" reaction of the bilirubin in the van den Bergh diazo test. In the serum of jaundiced patients, bilirubin appears to occur in two forms: one, supposedly an enol, couples immediately with Ehrlich's reagent (diazotized sulfanilic acid); the other, presumably the keto form, reacts only after digestion with alcohol, thus giving a delayed, or "indirect" reaction. The simultaneous presence of bile salts, as in obstructive jaundice, is necessary for the rapid, or "direct" reaction, while the bilirubin of hemolytic origin occurs in the keto form and must be enolized (with alcohol) before it will react with the reagent.[37]

Cholesterol, which is excreted in the bile, is soluble in a solution of bile salts provided certain factors are maintained. This solubility is dependent upon the cholesterol: bile acids ratio, the qualitative nature of the bile acids, and the pH of the bile. The bile from gallbladders in which gall stones were found on autopsy always showed a bile acid: cholesterol ratio of less than 8:1, while normal bile regularly shows a higher ratio.[39] [40]

A few other points should be mentioned in connection with the bile acids. One is their action in slowing the heart rate.[41] In this they show a faint resemblance to the cardiac poisons. Their cathartic action aids in the proper functioning of the intestines without, apparently, causing loss of muscular tone. Hence they are used therapeutically for that purpose. They can be used to test the rate of circulation since their characteristically bitter taste appears sharply after a given time following intravenous administration.

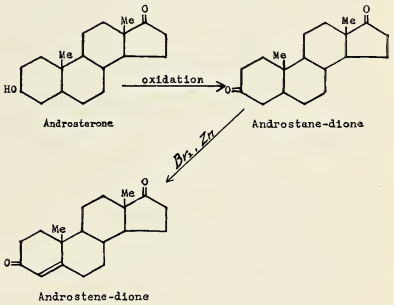
No group of steroid compounds has aroused so much interest, nor received so much attention in research, as the sex hormones. It is impossible to deal with these substances from a pharmacological point of view without considerable involvement of other sex hormones which are not chemically related to the sterids. For this reason, as well as for the sake of brevity, practically all pharmacological discussion of these compounds will be avoided in this paper. Nevertheless, it is desirable to make reference to the excellent work of Van Dyke[42] in reviewing the pituitary hormones and the interlocking mechanism of them with other hormones of the body.

Since the male sex hormones are more closely related chemically to cholesterol, they will be considered first. The first of these to be discovered and identified was androsterone, this work being accomplished by Butenandt and Tscherning.[43] [44] [45] They showed the structure to be:



Androsterone

We note now that the side-chain at position 17 has been completely removed. In the sex hormones this position is occupied by a doubly-bonded oxygen, an hydroxyl group, or an acetyl group. Associated in the urine with androsterone is dehydroisoandrosterone which is the 3-epimer of androsterone and has a double bond at position 5.[46] It is about one-fourth to one-third as active as androsterone. Butenandt found that oxidation of the alcohol group at position 3 to a keto group diminished the androgenic activity still further, but if a double bond were introduced into position 4 of this androstane-dione to yield androstene-dione, the latter compound was again highly active.



These investigations, coupled with the fact that these hormones did not give the same qualitative and quantitative results as testicular extracts, led to the belief that the true testicular hormone had not been discovered. Androstene-dione had a remarkable effect on the growth of the genitalia of rodents which androsterone did not have. Moreover, androsterone was more active than testicular extract in the cock's comb test while the reverse was true in the effect upon the genitalia of rodents. This indicated that testicular extract contained an-

[39] Newman, C. E.: Ziegler's Beitr. Path., **86**, 187 (1931).

[40] Andrews, E., Schoenheimer, R., Hrdina, L.: Arch. Surg., **25**, 796 (1932).

[41] Wieland H., Hildebrand, T.: Arch. exp. Path. Pharmakol., **85**, 199; **86**, 79, 92 (1920).

[42] Van Dyke, H. B.: The Physiology and Pharmacology of the Pituitary Body, vol. I (1935); vol. II (1939); U. Chicago Press.

[43] Butenandt, A.: Z. angew. Chem., **45**, 655 (1932); Naturwissensh., **21**, 49 (1933).

[44] Tscherning, K.: Ergebnisse Physiol., **35**, 301 (1933).

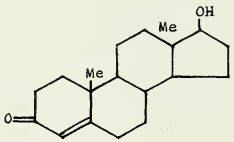
[45] Butenandt, A., Tscherning, K.: Z. physiol. Chem., **229**, 167, 185, 192 (1934).

[46] Butenandt A. et al. ibid., **237**, 57 (1935).

other hormone either identical with, or more closely related to androstene-dione.[47] This postulated substance was isolated and designated as testosterone. Judged by the capon test, it is 6 to 10 times as active as androsterone. Tests on castrated rats showed it to be 25 to 30 times as active as androsterone in stimulation of the seminal vesicles and 6 times as active in its action on the prostate.[48 51]

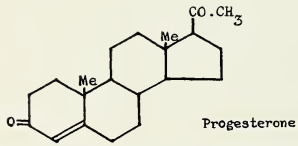
Testosterone was promptly synthesized independently by Butenandt[49] and Ruzicka.[50] It was shown to have the structure:

Testosterone

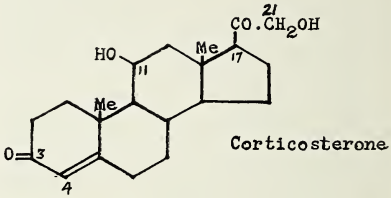


Shortly after it was learned that the action of testosterone was enhanced by the presence of fatty acids; and experimentally increased activation resulted from esterifying testosterone with the fatty acids, especially the lower members. The most active of these esters is the propionate, the form in which it is now most commonly employed.

Closely allied to the male sex hormones, but strictly a female sex hormone, is progesterone, the hormone elaborated by corpus luteum and placenta. It is made synthetically from stigmasterol for clinical use.[19 20] Its isolation and identification was accomplished almost simultaneously by four separate research teams,[52 53 54 55 56] and its constitution shown to be:

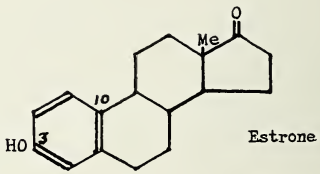


Thus we see that it is identical with testosterone except that it has an acetyl group instead of the hydroxyl group at position 17. This slight change, however, completely alters the action. A still more striking alteration in physiological action because of slight difference in chemical structure is that displayed in the comparison of progesterone and the cortical hormones. Examination of the structures of progesterone and corticosterone shows two differences: an hydroxyl group at position 11, and another at position 21:



11-Deoxycorticosterone has been synthesized and shown to have probably about one third the activity of corticosterone. It is available in the form of the acetate. This compound differs from progesterone simply by the hydroxyl group at position 21, and yet neither compound can take the place of the other in the body.

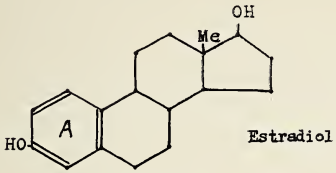
The estrogenic hormones show a greater modification of the ring structure than most other sterids. A glance at the structure of estrone shows complete unsaturation of ring A which imparts phenolic, and hence acidic, properties to the hydroxyl group at position 3:



We note also the loss of the methyl group at position 10. The estrogenic hormones are the only important sterids known that do not have this group. As in the case of the male sex hormones, certain synthetic derivatives and discrepancies of action led to the discovery of what is now regarded as the true female sex hormone, estradiol. Marrian and Doisy, who had discovered estrone,[57 58] were led to believe that the synthetic estradiol of Schwenk and Hildebrandt[59] might be the hormone

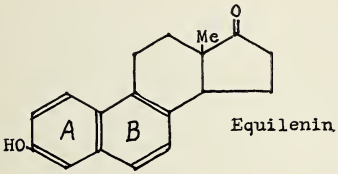
[47] Laqueur, E. et al.: Nature, **135**, 184 (1935).
[48] Laqueur, E., David, K. et al.: Z. physiol. Chem., **233**, 281 (1935).
[49] Butenandt, A., Hanisch, G.: ibid., **237**, 89 (1935).
[50] Ruzicka, L. et al.: J. A. C. S., **57**, 2011 (1935); Helv. Chim. Acta, **18**, 1264 (1935).
[51] Laqueur, E. et al.: Acta brev. Neerl, **5**, 84 (1935).
[52] Butenandt, A., Westphal, U., Hohlweg, W.: Z. physiol. Chem., **227**, 84 (1934).
[53] Wintersteiner, O., Allen, W. M.: J. Biol. Chem., **107**, 321 (1934).
[54] Slotta, K. H., Ruschig, H., Blanke, E.: Ber., **67**, 1947 (1934).
[55] Slotta, K. H., Ruschig, H.: Z. physiol. Chem., **228**, 207 (1934); Ber., **67**, 1270, 1624 (1934).
[56] Hartmann M., Wettstein, A.: Helv. Chim. Acta, **18**, 160 (1934).
[57] Marrian, G. F.: Biochem. J., **24**, 435, 1021 (1930).
[58] Doisy, E. A. et al.: J. Biol. Chem., **86**, 499 (1930); **91**, 641, 655 (1931).
[59] Schwenk, E., Hildebrandt, F.: Naturwissensch., **21**, 177 (1933).

actually secreted by the ovary, and that estrone and estriol were metabolic products of it. Doisy and co-workers isolated estradiol from sows' ovaries and proved its identity with the synthetic product.[60] Its structure is:



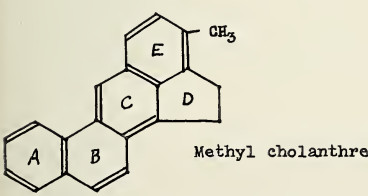
Estradiol

It is interesting to note the tendency toward greater unsaturation of the estrogenic hormones found in the urine of pregnant mares. Girard[61] observed that early in gestation, estrone is the predominating hormone. Later, equilin, with one double bond in ring B appears; and finally, toward the end of pregnancy, the urine contains considerable amounts of equilenin, an estrogenic hormone which is completely unsaturated in both rings A and B:



Equilenin

This tendency toward unsaturation leads logically to the question as to whether or not derangements in the metabolism of cholesterol or its related compounds causes the production of cancer. There is no direct evidence to show that such is the case. It is well known, of course, that coal tar, when applied to the skin for perhaps two or three months will cause cancer. Some of the carcinogenic hydrocarbons of coal tar have been isolated and shown to be *cyclo*-pentano-perhydrophenanthrene derivatives. One of the most potent carcinogenic hydrocarbons is methyl cholanthrene:



Methyl cholanthrene

This substance has been prepared *in vitro* from cholanic acid, the fundamental acid of the bile salts. In spite of this close chemical relationship, we cannot say that we have any reason to believe that such hydrocarbons are actually formed in the body.[62 63]

In conclusion, it must be pointed out that a paper of this type is most inadequate for the subject. Mere mention of some of the even better known sterids has been perforce omitted.

Here is a class of compounds which opens unlimited fields for investigation in every direction. It provides material for the pharmacologist, biochemist, and clinician to enable them to further explore into the mysteries of the human body as well as supplying valuable therapeutic agents. It challenges the biochemist and organic chemist to search for and synthesize other members of the group. And finally, it seems not illogical that this group furnishes a basis upon which to work in the field of chemotherapy. Here we have a ring system which is tolerated by the animal organism, and it might be employed as a vehicle for groups which could conceivably alter metabolic processes, act as bacteriostatic or bactericidal agents, or carry other therapeutic actions. If we can find such to be the case, we may also find that such drugs, since the cyclo-pentano-perhydro-phenanthrene nucleus is tolerated by the body, might not have the destructive and dangerous after-effects so commonly known among the benzamine and similar drugs.

[60] Doisy, E. A., MacCorquodale, D. W., Thayer, S. A.: Proc. Soc. Exptl. Biol. Med., **32**, 1182 (1935); J. Biol. Chem., **115**, 435 (1936).

[61] Girard, A. et al.: Comp. rend., **194**, 909, 1020; **195**, 981 (1932); **196**, 137 (1933); Bull. soc. chim. biol., **15**, 562 (1933).

[62] Cook, J. W., Haslewood, G. A. D.: Chem. Ind., **52**, 758 (1933); J. Chem. Soc., 1934, 428.

[63] Fieser, L. F. et al.: Am. J. Cancer, **29**, 260 (1937).

ABSTRACT

OUTER SENSORY NERVE DISEASES MAY BE SYMPTOMS OF BLOOD VESSEL DISORDERS

Some diseases of the outer sensory nerves resulting in such conditions as abnormal sensations are merely symptoms of more basic disorders affecting the blood vessels supplying the involved nerves, J. L. Fetterman, M.D., and D. K. Spitler, M.D., Cleveland, state in *The Journal of the American Medical Association* for June 8.

Some of these basic conditions are due to injuries following drug injections, blood clots in a vein, hardening of the arteries, diabetes, gangrene of a vein or artery, changes in the arteries brought about by syphilis, and inflammatory disorders of the arteries. All of them may reduce the supply of blood to the affected nerves and result in such nerve symptoms as burning sensations of the skin, shooting pains, excruciating muscular pains, areas of numbness or oversensitivity, and paralysis or weakness of the involved part of the body.

The authors point out that the local symptoms in each case depend on the nerve involved, the extent to which the disease has altered the involved site and the general status of the individual.

In view of this the two men declare that treatment should be directed toward eradicating the original disorder as well as providing relief of the local symptoms produced by the involved nerves.

MEDICAL EXAMINATIONS AND HEALTH SERVICE IN SCHOOLS (A SUMMARY)

The Bureau of Health and Physical Education, Indiana State Board of Health, has recently completed a survey of health and physical education programs of the "first class commissioned" schools of Indiana. This survey was made by the school principal or a representative selected by him. The Bureau of Health and Physical Education furnished "Health and Physical Education Score Cards—No. I" for elementary and "No. II" for secondary schools.

The standards presented in these score cards are based on the nine year intensive study by the Committee on Curriculum Research of the College Physical Education Association.

In order to keep the standards as flexible as possible for adaptation to schools of all sizes, it was necessary to resort to subjective scoring for some items. It was also necessary in some cases for the sake of brevity to include a number of important characteristics under a single standard in these score cards.

The rating standards are intended to represent a range from a fair-minimum program to a superior-ideal program: 100 = fair-minimum; 200 = good-average; 300 = superior-ideal.

ELEMENTARY SCHOOLS

The score cards were sent to eighty-five (85) Indiana elementary schools with a first class or continuous commission rating, rating given by the State Department of Public Instruction. Twenty-four (24) of these were returned. This was a return of 28.2%. (*No* fractional per cents are listed; this accounts for the failure of some sections to total 100%.)

The return was received from sixteen counties distributed geographically so that a sampling was received from every part of the state.

The score card used for the elementary schools included five sections. This paper is concerned with Section V entitled "Medical Examinations and Health Service." A summary of the return from these score cards follows:

Forty-eight per cent (48%) of the schools which sent in returns report part-time paid school physicians. Twenty-four per cent (24%) report adequate volunteer service by community physicians. Twenty-eight per cent (28%) indicate no provision for medical examining, advisory and emergency service.

Sixty per cent (60%) of the schools provide trained school nurse service for both home and school visitation purposes. Twelve per cent (12%) report good service, twelve per cent (12%) report fair service, and sixteen per cent (16%) do not have this service.

Twenty-eight per cent (28%) of the schools surveyed report that a comprehensive physical-medical examination by the school physician is required at least two or more times in a school level. Forty per cent (40%) report one examination in a school level. Thirty-two per cent (32%) report no required examinations.

Eighty per cent (80%) of the schools report assignment to rest, restricted activity or an excuse from required normal physical education activity. Twenty per cent (20%) make no provision for handicapped or restricted cases.

Forty-four per cent (44%) report an excellent permanent, continuous, progressive health record. Twelve per cent (12%) report a good health record and twenty-four per cent (24%) report a fair health record. Twenty per cent (20%) of the schools failed to report or indicate any record.

Twenty per cent (20%) of the schools report an "excellent" classification of pupils on the basis of medical examinations. Sixteen per cent (16%) report good and twenty-eight per cent (28%) fair classification. Thirty-two per cent (32%) indicate no pupil classification.

Forty-eight per cent (48%) indicate that a pupil returning after serious illness must have approval of physician or nurse before participation in strenuous activities. Thirty-six per cent (36%) report the standards "approximately meet." Sixteen per cent (16%) failed to indicate any supervision after illness.

Four per cent (4%) of schools reporting require teachers to take physical-medical examinations, while sixty-eight per cent (68%) do not report this requirement. Twenty-eight per cent (28%) report standards "approximately meet."

Eighty-eight per cent (88%) of the schools do not allow non-medical officers to diagnose or treat health disorders. Twelve per cent (12%) do not make any report on this item.

The city elementary schools which reported represent a total of 11,569 children. This total is 2.4 per cent of elementary school children in the state. Since this study is limited to the "first class commission" schools it indicates that the health conditions of the schools which have reported have much room for improvement. If it can be supposed that these schools represent the best practice in the state, and they are supposed to do so, the assumption would be that the continuous and conditional commissioned schools are not better and the chances are that they are not doing as well as those reporting.

SECONDARY SCHOOLS

The secondary school score card was sent to one hundred forty-three (143) secondary schools holding a first class commission. Fifty-six (56) were returned, making a return of thirty-two and eight-tenths (32.8) per cent. This score card has ten sections. Section VII is reported here. The Sec-

tion VII of the secondary score card on Medical Examinations and Health Service has ten parts. The maximum score possible for this section is thirty (30) points. The average score for all schools reporting is thirteen and six-tenths (13.6) points. This would indicate that there are not enough medical examinations and health service in these schools.

Of the fifty-six "first class commissioned" high schools reporting, fourteen per cent (14%) report a part-time paid school physician or (in schools of 2,000 or more) one or more full-time physicians as a provision for medical examining, advisory, and emergency service; forty-four per cent (44%) report volunteer service and forty per cent (40%) of the schools failed to indicate any service.

Trained school nurse service is provided in twenty-five per cent (25%) of the schools. Forty-four per cent (44%) did not report this service, and a total of thirty-one per cent (31%) report "Some service," which, according to the score card, would be "fair" to "good" service.

Eight per cent (8%) report two or more physical-medical examinations in a school level, thirty-two per cent (32%) once in a school level and fifty-eight per cent (58%) of the schools failed to report any examinations.

Sixty per cent (60%) of the schools report that no student is permitted to participate in strenuous class or athletic activity without a satisfactory medical examination. This does not seem consistent with the above report on physical-medical examinations. Thirty-two per cent (32%) of the schools failed to indicate any regulations of activity.

Sixteen per cent (16%) of the schools report that an excellent health record is kept, a total of forty-three per cent (43%) fair to good records and thirty-nine per cent (39%) apparently have no health record.

Five per cent (5%) of the schools classifying pupils report an excellent program, forty-three per cent (43%) fair to good and fifty per cent (50%) do not indicate any classification.

Sixty-six per cent (66%) indicate that assignment to rest, restricted activity or an excuse is approved by the school physician. Thirty-two per cent (32%) did not report any provision for excuse or other assignment.

Nineteen per cent (19%) of the schools fully met requirements for pupils returning after a serious illness. Sixty-five per cent (65%) report that the standards are approximately met and fourteen per cent (14%) do not indicate any inspection or care after illness.

One per cent (1%) of the high schools report a physical-medical examination for their teachers. An additional five per cent (5%) report that the standards are "approximately met." Seventy-six per cent (76%) do not report teacher physical-medical examinations.

Sixty-five per cent (65%) of the schools do not permit non-medical school officers to treat or diagnose health disorders. Thirty-five per cent (35%) do not report regarding this item.

The secondary schools reporting have a school population of forty-five thousand six hundred fifty (45,650) children, or twenty-three and eight-tenths per cent (23.8%) of the secondary school population of the state.

The same conclusions can be made for the secondary as for the elementary since the schools rated are the "first class commissioned" schools and represent the best education practice in the state. The schools in the lower classifications would rate no better and the majority would not rate as well as those reported in this study.

The fact that "Health" has been listed for many years as one of the "cardinal principles" of education would lead one to suppose that schools had made adequate provision for the protection of pupil-teacher health. This study would indicate that much needs to be done.

ABSTRACTS

ARTIFICIAL HIBERNATION HAZARDOUS AND UNJUSTIFIABLE

Artificial hibernation or "freezing" is hazardous and is not justifiable in the treatment of hopeless spreading cancer, Arkell M. Vaughn, M.D., Chicago, declares in *The Journal of the American Medical Association* for June 8 in a preliminary report of his observations on six such cases.

"Animal experimentations in this field might be of value as a preliminary to any future use of hibernation treatment for human cancer," he suggests.

No deaths occurred during hibernation among Dr. Vaughn's patients but four of them died between twenty-four hours and three weeks after hibernation. Two patients are still living seven and eight months respectively after hibernation, he reported at the time of preparing his paper. They were entirely free from pain for three months and no narcotics were necessary to relieve their discomfort.

"The relief of pain was the only result of possible value found in the two patients still living," the doctor says, "but it should be noted that these patients had had high voltage x-ray treatment preceding hibernation which might in some degree be responsible for the relief of pain. X-ray evidence reveals that one hibernation has not retarded the growth of the cancer in these cases.

"The hours spent in hibernation ranged from nine and a half to fifty-four and a half. The serious condition of the patient accounted for the shortness of the nine and a half hour hibernation."

The lowest temperature obtained in any of the patients was 83.2 F. rectal, which is about a degree higher than that registered in the mouth.

Members:

Do not fail to complete and send in the M-Day Questionnaire which appears as an insert in this issue.

THE EARLY DIAGNOSIS OF SPINAL CORD TUMOR*

A. EARL WALKER, M.D.
CHICAGO

On June 9, 1887, a young surgeon, just thirty years of age, was called in consultation by the leading English neurologist of that time, Dr. William Gowers. The patient was a middle-aged army captain who for three years had suffered severe pain in the back and over a period of four months had gradually lost all power in his legs. Dr. Gowers had concluded that the difficulty was due to an extramedullary spinal cord tumor, and Sir William Jenner had concurred in the diagnosis. Would the young surgeon operate? Through his mind must have passed the medical literature on spinal cord tumors: some fifty-seven cases—treated by various methods—but all dead. And the surgical background was so black that a member of the Royal Society said regarding a case, "I over and over again discussed the question with the patient of opening the spinal canal, but in the period of septicity the risks seemed to preponderate over the chances of finding a tumor and I did not ever seriously urge it on my old friend." But Victor Horsley turned his back on the past and within three hours of seeing the patient opened a more hopeful portal for the future—by completely removing the tumor. After a slow convalescence, the patient made a complete recovery.

Fifty years have passed since this first spinal cord tumor[1] was removed. Advances in surgical technique and asepsis have made such operations commonplace. Today, however, it is the surgeon's aim to cure before periods of suffering and disabling paralysis occur. To do this requires a knowledge of the signs and symptoms which such lesions may present in their early stages.

Incidence of Spinal Cord Tumors. Primary tumors of the spinal cord and its envelopes are relatively rare. In slightly over ten years only 58 such neoplasms have been encountered at the University of Chicago Clinics during which time approximately 234,000 patients were admitted. This would give a ratio of 1 spinal cord tumor to 4,000 admissions. In the same period approximately 500 cases of brain tumor were seen so that the incidence of spinal cord to brain tumor is about 1 to 8. In these statistics only primary neoplasms of the spinal cord or its envelopes are included; all metastatic tumors and tumors of the vertebrae are excluded. Prolapsed or herniated intervertebral discs which are not new growths are also eliminated. In Schlesinger's[2] report of 35,000 autopsies, 135 spinal cord tumors were found but this figure presumably includes tumors of the vertebrae and metastatic lesions. Accordingly he found a ratio of spinal cord to brain tumors of 1 to 6.

Since the tumors are not entirely confined by the spinal membranes and since the symptomatology of intramedullary, extradural and intradural tumors is surprisingly similar, the classification of spinal cord tumors in relation to the meninges has limited value clinically or pathologically. In this series the tumors were grouped pathologically as follows:

Intramedullary glioma	13
Glioma of the cauda equina	4
Meningioma	17
Neurofibroma	10
Lipoma	3
Congenital tumors	4
Extradural cysts	3
Sarcoma	2
Hemangioma	2

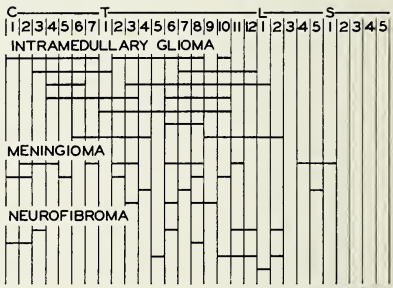


Fig. 1. Chart to show the location of the different types of spinal cord tumors. The intramedullary neoplasms extend over many segments, while the extramedullary tumors rarely extend more than 2 or 3 segments. (C—cervical vertebrae, T—thoracic vertebrae, L.—Lumbar vertebrae, S—Sacral vertebrae.)

Twelve of the tumors involved the cervical segments of the spinal cord, 37 the thoracic, and 18 the lumbosacral regions. The marked predominance of tumors in the thoracic region is probably only evidence of the fact that the thoracic portion is much longer than the other segments. The topographical distribution of the pathological types is fairly uniform. The intramedullary gliomas are found at all levels of the spinal cord. The meningiomas are predominantly tumors of the mid-thoracic region, although they do occur at other levels. The neurofibromas seem to have a predilection for the lower thoracic and lumbar region less frequently being found in the cervical

* Presented before the Northeastern Indiana Academy of Medicine at Kendallville, Indiana, March 28, 1940.

From the Division of Neurology and Neurosurgery, the University of Chicago, Chicago, Illinois.

[1] Gowers, W. R. and Horsley, V.: A case of tumour of the spinal cord. Removal: recovery. *Med. Chirurg. Trans.* 1888 2nd S. 53, 379-428.

[2] Schlesinger, H.: *Beitrage zur Klinik der Ruckenmarks—und Wirbeltumoren.* Jena, 1898.

region. In this series only two such cases were found—one associated with von Recklinghausen's neurofibromatosis and the second an extradural neurofibroma at the third cervical segment.

The sex appears to be of little importance in the entire group, 30 patients being female and 28 male. Nor is this factor of importance in the pathological groups with the exception of the meningiomas. Of the 17 patients having this type of tumor, 13 were females. This predominance of females has been noted previously.[3]

Individual pathological types of tumor seem to predominate in certain age groups. Three of the four congenital tumors occurred in children under four years of age. The intramedullary gliomas are predominantly tumors of adult life, although two cases in this series were in children. The meningiomas, tumors of adult life, occurred at all ages over twenty but particularly after the fortieth year of life. The neurofibromas seem to occur most commonly between the ages of 35 and 50.

SYMPTOMATOLOGY OF SPINAL CORD TUMORS

The symptomatology of spinal cord tumors may be simply illustrated by citing composite or type histories of lesions at the various levels of the spinal cord. The story of an intramedullary spinal cord tumor will be used to illustrate a cervical lesion; the anamnesis of a spinal meningioma for a midthoracic tumor; the history of a neurofibroma as an upper lumbar neoplasm; and the tale of the prolapsed intervertebral disc for the lower lumbar lesion. Since a typical history of these various syndromes does not exist, a composite or type history will be employed to illustrate the various symptomatologies.

The history of a cervical intramedullary spinal cord tumor. The patient is a female in her early forties and is the mother of three children. She was perfectly well until her last pregnancy seven years previously when she "strained her neck" during delivery. For several weeks movement of her head caused pain in the shoulder and the neck felt stiff. This gradually decreased. The patient noticed, however, that when she got up following her confinement she was much more weak and unsteady on her feet than she had been after her first two pregnancies. A series of intravenous injections and a month's holiday in Florida improved her condition remarkably, yet she never felt quite as steady as previously and her neck occasionally bothered her at night. Her family physician said she had a little rheumatism and advised local heat. She got around fairly well for about three years. Then one day, while walking, she tripped when attempting to step up on a curb and fell on her right knee. The knee was bruised and became quite swollen and painful. An x-ray photograph showed that there was no fracture. After two weeks the patient was able to walk again without pain, but the leg was quite stiff and she complained that it seemed awkward. Reassured by a physician that it was nothing, she continued to walk about with a limp. This impediment caused her considerable trouble for she tripped over what seemed to be insignificant obstacles. After one of these falls, in which she had struck her right shoulder on a table, she suffered such severe pain in the neck and right shoulder down to the elbow that for two nights she was unable to sleep. A hot water bottle to the shoulder gave some relief, but on the second day she noticed that the shoulder was badly blistered so she discontinued the heat. The pain gradually decreased and in about two months only an occasional ache or sharper pain on movement of the neck persisted.

Two years before entering the hospital she caught a bad cold. Her right arm ached and every time she coughed a sharp pain shot across both shoulders and down the right arm into the thumb. The right leg, which was still stiff, became more awkward and the left foot became numb. She noticed that occasionally when she coughed she lost control of her urine and wet herself. At other times she found that unless she hurried when she felt her bladder was full, she would be unable to hold her water.

Upon recovering from the cold she found that her legs were stiffer and that she tired rapidly when walking. Her unsteady gait occasionally embarrassed her for she felt sure that her friends thought she had been drinking.

Her right leg always felt cold but her left leg, which was becoming increasingly numb, burned and itched at times.

She began to notice that the right hand was not as dexterous as normally. Being a pianist she first observed that she could not span an octave with her hand, then chords became difficult. Finally her writing became uneven and illegible.

About four months prior to entering the hospital the numbness extended to the right leg and her gait became so clumsy that she had to use a cane. The right hand by this time was so weak that she had difficulty in using it at the table. Her bowels which, prior to her last confinement, had been perfectly regular were becoming more and more constipated so that she required cathartics. Urination was increasingly more difficult and she was incontinent at least once a day.

A few weeks before admission her legs became so weak that she could only walk a few steps. The numbness had extended up to her breasts. Her left hand was becoming weak.

Such is the frequent history of an intramedullary spinal cord tumor in the cervical region. Beginning with trivial difficulties usually rationally explained on a traumatic or rheumatic basis, the condition slowly progresses with periods of aggravation until the patient is completely paralyzed. As indicated, pain is not a prominent feature but

[3] Elsberg, C. A. and Dyke, C. G.: The diagnosis and localization of tumors of the spinal cord by means of measurements made on the X-ray films of the vertebrae, and the correlation of clinical and X-ray findings. *Bull. New York Neurol. Inst.* 1934, **3**, 359-394.

not infrequently burning, itching or tingling is annoying. Painless burns occur. Urinary disturbances are prominent in the late stages.

The history of a midthoracic meningioma. The patient is a housewife in the middle forties. Two years before coming into the hospital she noticed that the right leg was becoming stiff and seemed to tire easily. The foot would catch when walking upstairs. She consulted a physician who told her that she had arthritis and gave her a prescription. She followed his directions carefully but the leg became stiffer. She went to another physician who thought she had neuritis but, being a surgeon, referred her to an internist who after an exhaustive examination said she had an inflammation. He advised bismuth injections and at intervals of several months made two lumbar punctures. After each lumbar puncture her legs felt weaker. She thought he seemed disappointed when the reports came back negative and he then suggested vitamin B injections. But she continued to get worse and required a cane to walk. About six months before admission she experienced an aching pain in the middle of the back and right side of the chest, radiating to the epigastrium.

Because of her failure to improve, she consulted another physician who stated that she had gall bladder trouble. He gave her "shots" and sent her to a health resort for a vacation. While there her left leg became weak, and both legs became numb. She began to experience difficulty in micturition and had to be catheterized on one occasion. Shooting pains occurred in her back and legs.

Such is the anamnesis of a patient suffering from a mid-thoracic meningioma. Nor is the medical cavalcade exaggerated; that part of the above history is taken from an actual case. The condition is difficult to recognize unless one is on the lookout for spinal cord disease, and has at one's disposal all the modern methods of neurological examination.

The history of a thoracolumbar neurofibroma. The patient is a male slightly younger than the two previous patients. He had enjoyed perfect health until about one year before admission when he noticed a pain in the small of the back. It was not severe at first and usually did not bother him during the day. Just as he was about to go to sleep he would be aroused by the pain. Turkish baths and massage did not eliminate it; in fact, it became worse. He consulted a physician who, after strapping the back without relief, sent him to an orthopedic surgeon. A thorough examination including roentgenograms of the spine were made and he was told that it was merely a back strain. A corset was prescribed but gave no relief. Since he had not obtained relief he went to a chiropractor who adjusted and manipulated his back. Following the first treatment he felt somewhat improved but within a few days was suffering as much pain as ever. He returned for a second treatment, but the

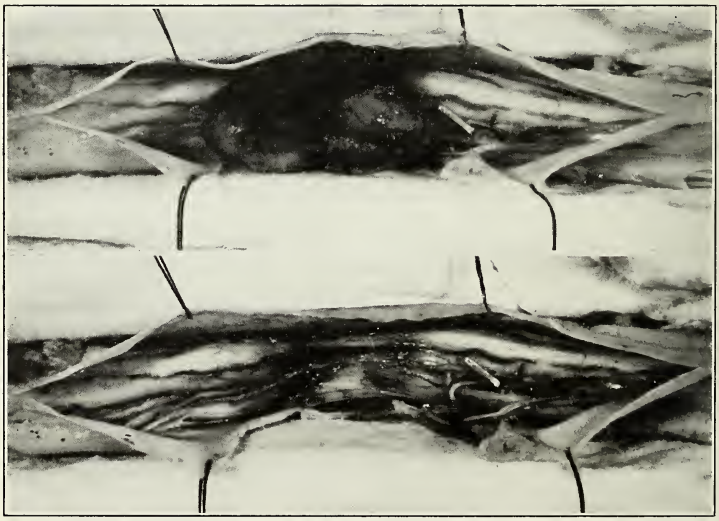


Fig. 2. An intradural meningioma at the fourth thoracic vertebra showing above the tumor in situ, and below the distorted compressed spinal cord after its removal. The dura is retracted by silk threads.



Fig. 3. An hour glass neurofibroma at the first lumbar vertebra. At the left the tumor is shown pushing the roots of the cauda equina dorsally and to the right. At the right is the tumor after removal, a hemostat being clamped to the nerve root which entered the capsule.

manipulation this time was so painful that he could not stand it. He returned home but could not lie down because of the pain. Standing up or walking about seemed to ease it. He noticed, however, that if he sneezed or coughed the pain was excruciating and radiated from the back down the anterior surface of the left thigh. He was unable to sleep because of the pain even with the aid of a sedative. He became irritable and lost interest in his work and home. He no longer had the inclination for nor ability to engage in sexual intercourse. At times he had to stand for several minutes before urinating. Yet he experienced no numbness nor weakness of the legs. The pain became so severe that he returned to the orthopedist who referred him to the hospital.

Thus the anamnesis of the thoracolumbar neurofibroma is the doleful story of excruciating pain with later bladder weakness and finally motor and sensory paralysis.

The history of a prolapsed intervertebral disc. The patient is a young man in the twenties or thirties who dates his present trouble to an attempt to lift a heavy bag from the floor. Just as he was about to raise the bag he was seized with a severe pain in the lower part of the back radiating down the back of the right leg to the ankle. It was so severe that he was unable to straighten up for several minutes. He was taken home and put to bed. The pain gradually eased but it was a week before he was able to walk about. He noticed during his period of bed rest that the lateral aspect of his right foot felt numb and that he had some difficulty in urinating. The urinary difficulty gradually disappeared. Upon walking again he found that the pain became worse. It was even more severe when he attempted to stoop so that he picked up objects from the floor by bending his knees and keeping the back straight. Coughing and sneezing aggravated the pain. Two weeks after the onset he attempted to return to work but after a half day the pain was so severe that he returned home and went to bed. A physician at that time advised him to stay flat in bed for three weeks. In the course of a month or two the pain gradually subsided. Three months later, however, it returned—not so suddenly as on the first occasion but he awoke one morning following a hard day's work with pain in the back and leg. It became worse in the next two days, forcing him to bed again. Once more he noted its aggravation by coughing, sneezing or straining at stool. The numbness over the lateral surface of the right foot had also returned. Three weeks rest in bed did not relieve his pain, so he was referred to the hospital.

This is the usual history of a prolapsed intervertebral disc. Like the syndrome of the thoracolumbar neurofibroma it is one of severe pain with relatively mild motor and sensory changes—the typical "sciatica."

CLINICAL FINDINGS IN SPINAL CORD TUMOR

Since tumors of the epidural space are frequently metastases from carcinoma of the prostate, retroperitoneal sarcomas, Hodgkin's disease, hypernephroma, and less commonly other types of malignancy, a complete physical examination is essential in any case suspected of harboring a spinal cord tumor. The examination may reveal other phenomena which are sometimes associated with spinal cord tumor. In von Recklinghausen's disease (multiple neurofibromatosis) spinal cord tumors are frequent and the cutaneous manifestations of this disease may suggest the correct diagnosis. At times lipomata and neurofibromata of the spine are associated with visible extraspinal tumors of the same pathological type. Then the examination may disclose evidence of tuberculosis or other disease which would suggest the pathological condition inside the spinal canal.

Of the neurological changes, weakness is probably the most frequent finding. It may be due to compression of the pyramidal or motor pathway

in which event the muscles are hypertonic or spastic. It may be the result of damage to the nerve roots or central gray matter of the spinal cord (a lesion of the lower motor neurone) when the involved muscles will be hypotonic or flaccid and atrophied. Associated with spasticity is commonly hyperreflexia and an extension of the big toe on plantar stimulation (Babinski's sign); with flaccidity, hyporeflexia is the rule and the toe signs are usually not pathological. The extent of the motor impairment is variable. At times the legs are markedly spastic with little weakness, and again paralyzed without spasticity. Movements of the proximal joints are frequently impaired more than movements of the hands and feet, the reverse condition to that seen in cerebral paralyses.

Sensory disturbances may be of any type. They may be unilateral or bilateral with or without a certain amount of dissociation of touch and pain. Sacral sparing is frequently seen both with intra- and extramedullary spinal cord tumors. The change may be mild or severe, and the upper limit may be definite or vague. Sometimes a dermatome of hyperesthesia lies above the upper margin of the level of hypesthesia. All types of sensibility may be involved or certain modalities may be spared. It has been said that intramedullary tumors may be distinguished from extramedullary by the presence of a dissociated sensory loss. It is, however, in most instances impossible to differentiate intramedullary from extramedullary tumors by the sensory changes. Dissociation of sensibility is seen with both types; sacral sparing may occur with either, and position and vibratory sensibility are frequently lost with both kinds of tumor.

Changes in the skin, hair and state of the peripheral vascular system may be noted. Frequently the level of a spinal cord lesion in the thoracic region may be ascertained by passing the hand up the abdomen and chest. A vasomotor level is noted by the increased resistance encountered due to a slightly more moist skin. This difference may be accentuated by putting hot towels on the thorax at the level of the lesion and noting the color changes. Frequently the "flare" following a scratch is less pronounced below the lesion, but may persist longer. The pilomotor response on exposure to cold may show a definite level on the thorax. In the extremities the skin may be edematous and shiny or warm and dry. Frequently the hair on the affected leg is less than on the normal. These sympathetic changes although frequently not pronounced are valuable adjuncts to the routine neurological findings.

Examination of the vertebral column by inspection, palpation and percussion frequently yields useful information. Angulation of the spines may indicate the site of disease. Frequently percussion of the spinous processes demonstrates certain painful or tender points. These may be over the site of the tumor or one or two segments below the tumor, in the latter event the hypersensitivity being due to the irritation of the nerve root by the tumor.

SPINAL FLUID FINDINGS IN CORD TUMORS

An examination of the spinal fluid is of prime importance in every case suspected of having an intraspinal neoplasm. Lumbar puncture is now a simple, easy procedure and gives invaluable information.

If the tumor is located in the lumbar region it may be difficult to carry out a puncture because of the presence of the tumor and the pain occasioned by the insertion of the needle. Repeated punctures at higher levels may enable one to determine the top of the tumor. The initial pressure of the spinal fluid in cases of spinal cord tumor (simply measured by the Ayer manometer) is usually normal or reduced. The determination of the dynamics of the spinal fluid by compression of the jugular veins individually and together indicates the presence or absence of a spinal block above the point of puncture. If no rise in the pressure occurs upon such compression, a block exists providing the needle is in free communication with the subarachnoid space. This latter point is determined by abdominal compression when a rise in pressure should occur even if a block is present in the spinal canal, but will not occur if the point of the needle is clogged by a nerve root or bit of arachnoid. Compression of the jugular veins may, however, cause a slow rise in the pressure of the spinal fluid with an equally slow fall or a rapid rise and slow fall. Both are indicative of a partial block of the spinal canal. Jugular compression with normal spinal fluid pathways should cause the normal pressure of 100-150 mm. to rise to at least 300 mm. A lesser increase in pressure should be regarded as suggestive of a partial block. If the tumor lies below the point of puncture it is possible to demonstrate a block by injecting a half per cent solution of novocaine in normal saline in the epidural space through the sacral hiatus. This normally causes a rise in pressure at the manometer within a few seconds. If this fails to occur, a block may be considered to be present.

After examining the dynamics of the fluid, a few cubic centimeters should be removed for gross inspection, determination of protein, cells, Wassermann reaction and the Lange curve. It may not be possible to obtain more than a few cubic centimeters of spinal fluid. This in itself indicates a partial or complete block, for normally over one hundred cubic centimeters of spinal fluid may be removed by lumbar puncture. The spinal fluid is normally colorless and clear but frequently in cases of spinal cord tumor it becomes yellow or ochre (xanthochromic). This tinting of the spinal fluid, however, is not pathognomonic of spinal cord tumor, for it occurs with brain tumor and subarachnoid hemorrhage. It is not uncommon that when the tumor lies below the site of the puncture

the first fluid will be xanthochromic and each succeeding specimen clearer and containing smaller amounts of protein. The protein of the spinal fluid should be tested by Pandy's reagent and measured quantitatively. When a partial or complete block is present the amount of protein is usually increased. Normally only 30-45 mgm. per cent is present in the spinal fluid but occasionally with a complete block due to tumor over 1000 mgm. per cent of protein is found. With such high protein concentrations the spinal fluid usually coagulates spontaneously on standing.

The Wassermann reaction of the spinal fluid is negative in cases of spinal cord tumor unless the patient has a concomitant syphilitic infection. The Lange curve even when high amounts of protein are present is usually normal. These normal curves constitute a valuable diagnostic point in the differential diagnosis of multiple sclerosis which in the early stages frequently stimulates spinal cord tumor, but which in about half of the cases has a paretic or less frequently a mid-zone type of Lange curve. In only three tumors of the present series were abnormal Lange curves seen and each of these was atypical (4411112222, 2222232100, 0000114454).

ROENTGENOGRAPHIC FINDINGS IN SPINAL CORD TUMOR

The use of the x-ray for demonstrating the bony structure of the spine is a valuable diagnostic aid in spinal cord tumors. Although less frequently than with brain tumors, a calcified neoplasm may be seen rarely in roentgenograms of the spine. More frequently, however, these tumors indicate their presence in the spinal canal by eroding the pedicles or bodies of the vertebrae. Elsberg and Dyke[3] have emphasized the value of measuring the width of the spinal canal as determined by the interpedicular distances. Although occasionally an eroded pedicle may be seen, more often the interpedicular distance must be measured to demonstrate a dilatation. The spinal canal is large in the cervical and lumbar regions but maintains a fairly constant width in the thoracic region. Particularly significant is an increase in the interpedicular distance at a point where the canal should be decreasing in size, when the adjacent interpedicular distances are normal. The erosion of the pedicles and dilatation of the spinal canal are particularly apt to occur with neurofibromata, approximately one half showing such changes. Another type of erosion is seen with these tumors due to the fact that they grow along the spinal roots and through the intervertebral foramina. By their growth the latter become markedly enlarged. Meningiomas show erosions in a relatively small percentage of cases. Intramedullary gliomas are even less inclined to produce dilatation of the spinal canal. Tumors of the spinal cord arising in childhood may, however, cause a marked enlargement of the canal. This has been seen in two cases of intramedullary dermoids and in one ependymoma of the lumbar cord. Benign or simple extradural cysts which in some instances are associated with kyphosis dorsalis juvenalis almost constantly produce a marked thinning of the pedicles at the level of the tumor with a corresponding enlargement of the canal. Rarely a marked dilatation of the spinal canal may be associated with a malformation of the cord without neoplasia.

Further information may be obtained from roentgenography of the spine by the use of contrast media. Following the introduction of lipiodol for myelography by Sicard and Forestier,[4] a great deal of discussion, both pro and con, arose over its use. Today there seems to be definite evidence that once introduced into the subarachnoid space the iodized oil is not absorbed or eliminated. It causes a mild meningeal reaction for a few days and becomes gradually encysted along the spinal cord or in the sheaths of the spinal nerves. In spite of its persistence, however, there is no evidence that it produces deleterious effects over a period of time. Occasionally, however, a severer immediate reaction occurs. For this reason lipiodol should not be used unless the case presents definite evidence of neurological disease compatible with neoplasm of the spinal cord, the diagnosis of which cannot be made without myelography, and/or severe intractable radicular pain with or without neurological abnormalities. Air myelography has been used off and on in the past twenty years since Dandy[5] introduced it. Although not a dependable method, it has a certain definite advantage over lipiodol since the air is rapidly absorbed.

By means of myelography the site of tumors which cannot be determined clinically can be accurately localized. Rarely is there any difficulty in interpreting the fluoroscopic findings in lipiodol myelography. The picture is frequently sufficiently clear to allow a pathological diagnosis. Thus prolapsed intervertebral discs produce a characteristic defect in the lipiodol column. Intramedullary spinal cord tumors cause the lipiodol to split into two beaded columns which outline the dilated spinal cord for several segments. Neurofibromata and meningiomata frequently cause a complete block, the margin of which is concave.

THE HERNIATED INTERVERTEBRAL DISC

Although the herniated intervertebral disc is not a neoplasm of the spinal cord it has received recently so much attention[6] that no discussion of spinal cord tumors would be complete without specific reference to it. The precise incidence of this condition has not been determined. Its frequency will depend upon the criteria used for its diagnosis—the more frequently the spinal canal is explored, the greater will be its incidence. A

[4] Sicard, J. A. and Forestier, J.: Méthode radiographique d'exploration de la cavité épidurale par le lipiodol. *Rev. Neurol.* 1921, **37**, 1264-6.

[5] Dandy, W. E.: Röntgenography of the brain after the injection of air into the spinal canal. *Ann. Surg.* 1919, **70**, 397.

[6] Love, J. G.: Protruded intervertebral discs. *Proc. Roy. Soc. Med. London.* 1939, **32**, 1697-1721.

typical clinical history of this condition has already been presented. In about half the cases there is no definite history of straining or injury to the back. The story is that of the textbook "sciatica." But the latter is only a clinical syndrome; it is not a pathological entity. In fact, sciatica has become a wastepaper basket into which all intangible low back and leg pains are thrown in the hope that they will have been gotton rid of before the patient's next visit. It is, like "flu" in general medicine, the diagnosis of the diagnostically destitute. The sciatica syndrome may be the result of many different pathological conditions within the spinal canal, in the vertebrae, in the pelvis or along the course of the sciatic nerve. To enumerate but a few of these: spinal cord tumor, chronic arachnoiditis, syphilitic radiculitis, epidural metastases, prolapsed intervertebral discs, hypertrophied ligamentum flavum, epidural abscess, spondylolisthesis, osteoarthritis of the spine, vertebral fracture, vertebral tumors, Paget's disease, osteomyelitis, inflammatory disease of the pelvis, neoplasm of the pelvic structures, particularly carcinoma of the bladder and prostate, abscesses of the buttocks and many other conditions.

The investigation of the sciatic syndrome then demands a careful clinical examination with the above possible etiological factors in mind. Roentgenograms of the spine including the hip joints and the entire lumbar spine are necessary. What further examination may be required usually depends on the history and neurological findings.

In cases of prolapsed intervertebral discs the neurological findings may be scant or numerous. Usually there is no detectable weakness in the extremities which may not be accounted for by the pain occasioned by the exertion. At times, however, a definite weakness is present in the dorsiflexors of the foot or the flexors of the knee. Sensory changes may be absent or pronounced. At times a subjective numbness on the lateral aspect of the calf or foot without apparent impairment of the appreciation of pin prick is the only sensory abnormality. In many cases there is a slight hypesthesia over the lateral aspect of the calf if the disk is prolapsed between the fourth and fifth lumbar vertebrae, or over the dorsum and lateral part of the foot if the herniation is at the next lower interspace. In some instances, however, there is a hypesthesia in all the sacral segments on the involved side and occasionally also on the opposite side. The ankle jerk on the affected side is frequently diminished or absent. If the lesion is between the fourth and fifth lumbar vertebrae, the ankle jerk is less likely to be absent than when the lesion is at the interspace between the fifth lumbar and first sacral vertebrae. Occasionally both the knee and ankle jerks are increased on the affected side. Straight leg raising is usually painful and limited to 20-30 flexion at the hip. Not infrequently the pain may be reproduced by deep pressure to the ipsilateral side of the fourth or fifth lumbar spines. Compression of the jugular veins causes, in many cases, increased pain down the leg.

In some cases roentgenograms of the spine show a narrowing of one of the lumbar interspaces. Lumbar puncture may disclose an increase in the protein of the spinal fluid but often the latter is entirely normal. Myelography usually reveals a partial or complete block or the characteristic defect in the spinal canal at the interspace, although it may be negative in the presence of an herniated disc. Such are the usual clinical findings in cases of prolapsed intervertebral disc.

But when should lumbar puncture and myelography be done? To all cases of the sciatic syndrome? Do not the majority recover with the old-fashioned therapy of bed rest? The answers depend upon the viewpoint of the surgeon. Some believe that all cases of typical sciatic pain with sensory or reflex disturbance have a prolapsed disc providing there is no clinical or roentgenological evidence of another lesion which might account for the syndrome. Such cases they believe should be explored without myelography. Others believe myelography should be carried out before surgical intervention in such cases but may operate even if the myelography is negative. Still others refuse to operate unless conservative therapy—absolute rest in bed for three or four weeks—has failed to give relief, and then only if myelography demonstrates a defect in the spinal canal. Which is the proper method of procedure? The end results from the different therapeutic measures cannot as yet be assessed—if they ever can—for accurate and detailed scores are not available. It is certain, however, that many patients suffering from the sciatic syndrome will recover with rest in bed—patients who would be surgical candidates in the hands of some surgeons. That certain of these cases will have relapses in a year or so is not a valid argument against conservative therapy for operated cases also have relapses—the frequency of which is as yet unknown. On the other hand rest in bed does not relieve certain cases and merely prolongs their illness.

Until the precise indications and value of operation in terms of five year cures has been determined, it would seem wise to try conservative management in all cases. If a period of bed rest, and a back brace, when up, does not give definite amelioration of symptoms, lumbar puncture and myelography are indicated. Further therapy should depend upon the myelographic findings.

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IN THIS ISSUE

Medicine Today

"Be not the first by whom the new are tried, nor yet the last to lay the old aside."

T. A. DYKHUIZEN, M.D.
FRANKFORT

Derivative of Sulfanilamide in Treatment of Staphylococcus Infection. With the advent of sulfanilamide interest has been centered on chemotherapeutic agents with renewed enthusiasm. The year 1940 gives promise of the development of some compounds of sulfanilamide which may be specific against other bacteria that now are immune to the effects of sulfanilamide or sulfapyridine. The following reports have been selected to illustrate the possibility of compounds that are now being evaluated.

W. E. Herrell and A. E. Brown in *The Proceedings of the Staff Meetings of the Mayo Clinic* give a preliminary report on the use of sulfamethylthiazol in the treatment of a staphylococcus aureus infection. Sulfanilamide, prontosil, and sulfapyridine all show toxic manifestations when given in large doses or over a long interval. The new derivative of sulfanilamide (sulfathiazole) seems, in vitro as well as in vivo, to retain a similar action against experimental streptococcic, pneumococcic, and staphylococcic infections as does the original sulfapyridine. The methylated derivative of sulfathiazole, sulfamethylthiazol, appears to be particularly efficacious against the staphylococcus aureus. Evidence seems also to justify the conclusion that adequate dosage over a several weeks' period is accompanied by fewer toxic manifestations and certainly less severe ones. The author's case was that of a woman fifty years of age whose clinical diagnosis was chronic cholelithiasis and cholecystitis. Five days post operatively she developed a bronchopneumonia at the base of the right lung. After refusing sulfapyridine at first she was given 90 grains daily by mouth after the third day of her pneumonia and four days later her improvement warranted discontinuing the drug. However, she had vomited frequently while taking the drug. Shortly after operation a purulent discharge started draining from the operative wound. The temperature reached 104 degrees and a blood culture showed positive staphylococcus aureus identical with the wound culture. Attempts to administer sulfapyridine again were refused by the patient because of the previous nausea and vomiting. An initial dose of 2 grams of sulfamethylthiazol was given and repeated in four hours. Then she was given 1 gram every four hours, day and night. Twenty-four hours later her temperature was less than 100 degrees. A blood culture in forty-eight hours was negative. There was no nausea or vomiting. Two subsequent cultures have been negative.

—*Digest of Treatment*, April 1940, p. 721.

Thomas S. P. Fitch likewise reports on the **use of sulfathiazole in a case of staphylococcus aureus epidural abscess with septicemia and pyemia.** His report is of particular interest because hemolytic staphylococcus septicemia with pyemia has been almost 100% fatal. His patient, a 10-year-old girl, had an epidural abscess following injury and at operation staphylococcus aureus was cultured from the abscess and blood culture revealed 50 colonies of the same germ per cc. of blood. Following drainage, she had a stormy course and developed an embolic pneumonia with empyema which was treated by closed drainage. The following week she developed a metastatic abscess over the right ankle which was drained. Sulfathiazole was then started with 3.4 grams orally followed by ½ gram every three hours. She received a total of 231 grams of sulfathiazole in 17 days. The toxic manifestations were an erythematous and morbilliform rash with fever of 105 degrees just before discontinuance of the drug. The patient vomited at times but this did not interfere with oral medication; cyanosis was mild and transient. There was no leukopenia. Blood culture was normal in 8 days and temperature was normal in 40 days.

—*Digest of Treatment*, May 1940, p. 804.

On the basis of the activity of sulfathiazole and sulfamethylthiazol on staphylococcus, Helmholz determined to try out the effect of these drugs on the streptococcus faecalis since it was resistant to sulfanilamide and sulfapyridine. As a result of this work he was able to conclude that in urinary infections sulfathiazole and sulfamethylthiazol have a decided bactericidal effect on streptococcus faecalis. The effect on streptococcus faecalis and staphylococcus aureus is decidedly greater than on the gram negative bacilli. The staphylococcus aureus is more susceptible to the action of sulfathiazole than is the streptococcus faecalis. Sulfamethylthiazol is more effective in its action on streptococcus faecalis than is the sulfathiazole. Of the gram negative bacilli, Pseudomonas aeruginosa seems to be the most resistant. Sulfamethylthiazol in high concentration failed to kill six strains of Pseudomonas aeruginosa but sulfathiazole in the same concentration rapidly killed them. It was evident that the two drugs sulfathiazole and its methylated derivative, when given in the usual dosage by mouth, have a definite bactericidal effect on the organisms found in urinary infections. In contrast to sulfanilamide and sulfapyridine, they

will kill off strains of Streptococcus faecalis and staphylococcus aureus which are unaffected by the other compounds.

—*Digest of Treatment*, May 1940, p. 807.

Grayson Carroll, et al., report **five cases of staphylococcus septicemia treated with sulfamethylthiazol.** The first was a male, age 57, operated on for a perinephritic abscess due to staphylococcus aureus. Sulfanilamide and sulfapyridine and blood transfusions were ineffective. Fourteen days post operately he was started on sulfamethylthiazol, 14 to 16 grams daily for 16 days. The temperature and W.B.C. were normal in eleven days and urine culture was negative on the twentieth day.

The second case was a woman, age 20, who developed staphylococcus septicemia from a breast abscess 12 days post partum. Again sulfanilamide and transfusions were ineffective. On the tenth day sodium sulfamethylthiazol was given intravenously in 1% solution, 50 cc. as the initial dose and 25 as subsequent doses at 8-hour intervals. This was continued for two days and then oral medication was begun, 2 grams being given at 8-hour intervals. On the second day her temperature was normal, and blood culture was negative on the third day.

The third case was that of a male infant who developed a staphylococcus septicemia with septic synovitis of the knee, shoulder and hip at the age of twelve days. Neoprontosil and whole blood intramuscularly were ineffective. Then sulfapyridine was employed for twelve days with no improvement. At this time sulfamethylthiazol was given. The initial dose was 2 grains followed by 1 grain every 4 hours for twelve days except for two days when 2 grains every 4 hours was given. Temperature was normal in two days and joint swelling had decreased considerably by the twelfth day.

The other two cases were instances of mild staphylococcus aureus pyelonephritis both due to staphylococcus aureus. Both showed negative urine cultures one week after the drug was given.

—*Digest of Treatment*, May 1940, p. 809.

CONTINUOUS DRIP ARSENICAL THERAPY OR MASSIVE DOSE ARSENOTHERAPY: CASE REPORT

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In January, 1940, Dr. George W. Bowman cited some references and suggested that a case of this nature be undertaken in the Indianapolis City Hospital. A plan was worked out and the consent of Dr. C. W. Myers, hospital superintendent, was obtained.

Quoting Hyman, Rice, et al.,[1] "One of the most serious obstacles to the eradication of syphilis lies in the fact that even the most modern methods for rendering the disease permanently non-communicable require a minimum of from eight to ten months of treatment. A therapeutic method which would radically shorten this period and be safe, efficient and not too expensive would go far toward the ultimate conquest of this infection and be of enormous significance in the public health control of syphilis.

"In the chemotherapy of syphilis, Ehrlich originally strove to effect a total sterilization of the infected tissues. The serious and even fatal toxic phenomena that resulted from the administration of the arsenicals in effective spirocheticidal doses led to the abandonment of this and subsequent attempts at massive chemotherapy, in favor of the use of divided doses spread over a period of months or even years."

"The concept that these reactions might not be specific to the drug, but rather technical in their origin, arose from the work of Hyman and his co-workers in 1931."

We considered that the case selected should present: (1) An early primary or secondary syphilis; (2) Physical stamina of average or better; (3) Absence of contraindications as disclosed by history; (4) A reasonable permanence of local residency.

Mapharsen was selected, chiefly because of lessened chemical change toward toxicity on exposure. The proposed medication plan: 0.10 gm. per day and not to exceed a rate of 0.01 gm. per hour, until a total of 0.50 gm. was administered. This implies approximately 10 hours of continuous intravenous therapy daily for five days.

CASE REPORT

On February 14, 1940, a patient presented himself with a penile chancre of twelve days' duration. There was no history of previous infection or of previous treatment for syphilis. Incidental negative serology was reported in January, 1939. This was a contact reference and the origin of infection was established. He admitted intimate relations with a known case of current secondary syphilis from December 25, 1939, to February 5, 1940.

History: Colored male, age 34. Garage worker. Divorced. No children. Patient left contact February 5, 1940, becoming apprehensive when the

[1] Hyman, H. T.; Chargin, Louis; Rice, John L.; and Leifer, William.: Massive Dose Chemotherapy of Early Syphilis by the Intravenous Drip Method, *J.A.M.A.* **113:** 1208 (Sept.) 1939.

penile lesion appeared. He came to the dermatological clinic first on February 14th, after having used local medication. Serology drawn was reported negative. He returned the following day, when the chancre darkfield was positive and there was bilateral inguinal adenitis. The patient was referred to the hospital.

Past History: The patient was a frail child. There were rheumatic episodes in 1930 and 1938, and he had hives as a child. A dermatitis in August, 1939, followed iodide therapy prescribed in the heart clinic. He attended the medical clinic in June, 1939, where his complaints were multiple, but no pathology was found. The sputum was negative. Electrocardiogram was normal. The heart clinic prescribed iodides. He has been very nervous and restless all of his life. He smokes 1½ or more packages of cigarettes daily; drinks 4 to 5 cups of coffee, and 7 to 8 Coca-Colas daily.

Family History: Familial cardiac history.

Physical Examination: Colored male, apparently less than 30 years of age, well developed and nourished, and not apparently ill. Patient is intelligent and very cooperative. Height, 5 feet and 8 inches; weight, 140 pounds; blood pressure, 125/80. Examination essentially normal except for marked caries of teeth and chancre of glans corona with bilateral inguinal adenitis.

Preparatory laboratory work:

1. Chest plate.
2. Urinalysis (daily through treatment).
3. Urea clearance for renal function.
4. Serum bilirubin (and every other day during treatment).
5. Complete blood count (white counts daily during treatment).
6. Platelet count (and every other day during treatment).

Intravenous therapy was begun at 2 p. m. on February 18, 1940.

First day: Medication total of 0.04 gm. mapharsen in 600 cc. distilled water during 6 hours. Patient began chilling at the end of this time with a subsequent fever curve, duration 6 hours, maximum temperature 102.8. Temperature was normal next morning. Impression: Herxheimer, or primary, fever.

Second, third, fourth and fifth days were all similar in technique. Intravenous 10 hours daily, the medication 0.02 gm. of mapharsen added every 2 hours. Sixth day, compensating for the short first day, 0.06 gm. were given in 6 hours in the same manner. Intravenous fluid approximated 1800 cc. daily, alternating normal salt with distilled water, all in 5% dextrose.

Vein ache became progressively lessened from day to day. Vein tenderness was transitory inasmuch as there was no residual of over 48 hours. Pain along the vein, notably at first, was acute and required acetyl salicylic acid and codeine for relief: total 6 doses, four of which were required on the first and second days. Thrombosis was subsequent to vein selected but was limited to proximal two to four inches. No evidence of acute phlebitis was encountered. A different vein was selected daily.

Throughout the course of treatment there was found no significant alteration of blood pressure. Temperature was normal after the primary fever. No significant change occurred in the blood cell counts, serum bilirubin, or in renal function. Platelets prior to treatment: 230,000—lowest count 140,000; 250,000 at time of release. At termination of the fifth day, the patient complained of right hypochondrial tenderness and some fullness, but the liver was not palpable. There was no sign of this the following morning. Diet was soft, high in vitamins, low in carbohydrates. His appetite was good throughout with the exception of the second day (following fever). Sleep was natural. Fluids were taken ad libitum.

Darkfield remained positive until the second day when one treponema was found after long search. Darkfield was negative thereafter. The lesion became dry on the fifth day, showing marked resolution. Serial clinical photographs were taken.

Serology:

Feb. 14, 1940 ____Negative, negative, negative
Feb. 16, 1940 _____4 plus, 2 plus, 2 plus
Feb. 22, 1940 _____4 plus, 3 plus, 4 plus
Feb. 27, 1940 _____4 plus, 4 plus, 4 plus

Spinal:

Feb. 26, 1940 ___Cell count, 0; globulin, negative; Wassermann, negative, gold solution, no change; pressure, normal.

Admitted February 15, 1940. Therapy began February 18, 1940, and terminated February 23, 1940. He was released February 27, 1940. Total hospitalization, twelve days.

The patient experienced post spinal headache and also caught a cold shortly after released. With subsequent recovery, he has gained in weight and general vitality. The serology which became increasingly positive during therapy has faded out to negatives on the last two examinations per schedule.

Proposition: The patient should remain under observation. Serology should be repeated every two weeks until definitely negative. Repeated tests should be made at intervals both for blood and spinal fluid. The average reversal of serology within three months, without any further treatment of any kind, was the experience in reported cases, i.e., Hyman, et al.[1] of the New York group.

It appears likely that, with more experience, laboratory costs can be safely reduced, and the efficiency of case management so improved that the required hospital days will be lessened.

If this plan is practical, irresponsible and uncooperative patients may be better treated during short hospitalization. The massive therapy would be more successful in a short time than regular treatment in two years, if possible at all. Public health and economy would be served in the saving of investigations and weekly treatment routines, and the delinquency problem would be relieved.

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JULY, 1940

Editorials

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THE WAR SITUATION

President Ruddell devoted his page in the June JOURNAL to a discussion of "M-Day." Similar discussions of this highly important subject have appeared in several other state medical magazines, all of which assures us that we of the medical profession are not remiss in our duties, in these times of world-wide strife and dissension. No man has the right to predict, even to conjecture, what lies before the people of this country, but we do have the right to plan what might be done and what we can do, IF——.

As we see industry, here in one of the greatest of the nation's manufacturing centers, we can but sense their preparations for an M-Day. We note the expressions on the faces of our fellow townsmen as they see the headlines of the newspapers; some of them express themselvs, most say nothing though their faces reveal their thoughts. There is no occasion to become panicky about it. The thing for us to do is to consider, calmly and carefully, what can be done, then take the necessary steps that will insure our being prepared for any eventuality that may arise.

The Indiana State Medical Association has faced many crises in its long history, yet each crisis has been met and our method of handling them has met with the approval of the people of our state. We have answered every call sent to us and have rendered yeoman service upon every occasion. But, while we do not believe in anticipating trouble of any sort, it does seem that right now is the time for this great medical organization to take stock of itself. Just what can we do, and how long will it take before we are ready to do it? These are two mighty important questions, the answers to which must not be long delayed when the questions are asked of us.

Preparedness means not only readiness for the eventuality of real conflict, but also being prepared to care for the millions that are not actually engaged in strife of any sort—the folk at home. War is the respecter of no person, regardless of age or station in life. Though a family may be thousands of miles from a battle scene, the effects of battle are to be observed in that same family; and it is to the medical man that most of these folk will appeal in time of distress.

We pray that we may all keep our heads, and that we may maintain an even keel; at the same time we pray that, if there comes a time when the medical profession receives an M-Day call, that same group will answer, "We are ready!"

JUST WHO IS PRACTISING MEDICINE?

The above question is being asked very commonly these days and the answer seems to be "'Most everybody!" The encroachment upon the private preserves of men of medicine has, until recent years, been a gradual one but it now seems that, having taken over this and that thing, the poachers have become extremely bold and are carrying on their doings in the open. Driscoll, the writer who took over the "New York Day by Day" column of the late O. O. McIntyre, tells of a "new discovery" he has made in New York, that certain barber shops have become solicitous as to the condition of the eyes of their customers, and suggest remedial measures. These consist of "washing out the eyes" with a few drops of a highly advertised solution, and the barbers add a charge for this service when making out the bill. There is nothing new about that, however, for some twenty or thirty years ago the Chicago manufacturer of the first of the highly advertised nostrums made the discovery that the distribution of a "full-sized dollar package" of his product to barber shops in the larger communities, seeing to it that there was a bottle for every barber, was good advertising; in fact, he once said that this was one of the happiest thoughts that ever had come to him. The barbers used it freely, commenting on its unusual efficacy.

New York state physicians, during the recent legislative session in that state, endeavored to do something about radiological technicians, seeing to it that legislation was enacted defining radiology, but the measure failed of passage probably because of lack of coordinated interests. There is no question but that the use of x-rays for diagnostic purposes constitutes the practise of medicine, just as when it is used as a therapeutic meas-

ure, and since this is true the use of those agents should be restricted to licensed practitioners of medicine.

Much of the difficulty encountered along these lines is, of course, due to the fact that almost everybody, these days, is a "doctor"; that term has come to mean nothing at all definite. It would seem, however, that members of other professions would recognize the differences between medical and pseudo-medical folk.

There is before us a letter from a school physician which comments on this fact. Among other comments he says, "Teachers and teachers' organizations will fail to recognize the necessity for proper refractions in school children just as long as their family physicians refer them to other than oculists for proper refractions." The same letter refers to an optometrical meeting, called a "congress," recently held in a Midwestern city, this meeting to be addressed by three "doctors," each of whom was to discuss various refractive problems. One of these men, with a degree of Ph.D., is professor of education in a large university; another, with the same degree, is head of another department in the same school, while the third holds the degrees of A.M. and Opt.D. Yet they are listed as doctors, and the average registrant of this course probably accepts them as medical men.

Not long ago a group from one of our own state universities made some sort of a survey of a northern Indiana city school system. Having some eye trouble, he called upon a local optometrist, rather than consult a medical man! At a large meeting held in Chicago, not long ago, an Indiana University professor addressed the group, making a plea that hearing tests, visual tests and various other examinations be made *by the physical education teachers* in our Indiana schools! As a climax, a supervisor in the speech and hearing clinics at Indiana University, a man with a doctor's degree (Ph.D.), spent considerable time in Lake County *instructing the county nurses in the art of making hearing tests.*

These are but a few of the things of this sort that are being reported to us regularly, and which are evidences that our field is increasingly being invaded by non-medics. They make these so-called examinations and deliver their pronouncements with such fervor that they sell not only laymen but many physicians are duped into believing them. It is hardly necessary to repeat that our drugless healers, duly licensed by the State of Indiana, are carrying on what amounts to a general practise, even including some surgery; "straight" chiropractic, for example, is fast becoming a lost art in Indiana. One of these chaps, not long ago, told us that there were very few of this variety operating in Indiana at the present time, and that many of them had learned to go after "the big money in a big way."

The remedy, of course, is enforcement of our present laws and, if the present laws do not cover the situation, see to it that we get the needed legislation. It's about time we arise to the occasion and do something about it!

ARE YOU A "CLINIC"?

Particularly in the last few years it has become a rather common occurrence for one or more physicians to operate under the name "clinic." In this way the use of individual names of the members of the group are suppressed and, in many cases, a less personal relationship is established.

Occasionally this is done as a matter of convenience; often, to reap the benefits of the reputation achieved by some of the large nationally known groups; and perhaps frequently, because the arrangement of service is according to the definition of a "clinic" as commonly understood and thus it is desirable to use this descriptive term.

Recently, a decision from one of the companies which sells protective insurance against malpractice suits came to light. They say the name "clinic" carries with it the implication of an organization which is equipped to render a superior quality of medical service and the patient entering has a right to expect that he will receive a greater degree of care and skill than he would at the office of an ordinary private practitioner. Consequently, any physician operating under such a name would be held to a higher degree of care and skill than the general practitioner in the event he shou'd be made the defendant in an action for malpractice, according to the legal lights of the indemnification company.

Another feature stressed is that each man with offices in the "clinic" building may be held liable for any negligence on the part of any of the others, whether medical, dental, or other, since the word "clinic" carries with it the implication of a partnership. Of course, the interest of the insurance company was that the rate to cover malpractice insurance for anyone who comes in that classification would be considerably higher than when practicing under one's own name as an ordinary private practitioner.

If you wear a high silk hat you may get your ears frozen.—*Michigan State Medical Journal*, June, 1940.

TRICKS OF THE TRADE

Enemies of the medical profession know no bounds in their efforts to bring about the plans they have conceived; in numerous instances, both in state and federal legislative bodies, they have attempted to consummate their nefarious ends, either by direct legislation or by attaching a "rider" to some measure that seems reasonably certain to become a law. So it was that in the recent session of the New York State General Assembly one Goldberg, a proponent of compulsory health insurance, attempted to insure the passage of his

bill by attaching same to an unemployment insurance act.

However, the Medical Society of the State of New York, through its legislative committee, was on the alert and although the measure passed both branches of the legislature it was vetoed by Governor Lehman after its full meaning had been explained to him.

Samuel J. Kopetzky, Chairman of the Literary Committee in charge of the publication of the *New York State Journal of Medicine*, wrote the following editorial, which we reprint in full, believing it to be a timely presentation of a most important subject:

TRICKS OF THE TRADE

At this writing the Goldstein health insurance bill appears doomed. Barred from the front entrance, health insurance is now trying to slip in through the back door, concealed in an amendment to the State Unemployment Insurance Law sponsored by Assemblyman Goldberg.

The proposed addition to the Unemployment Insurance Act would convert the latter into a health insurance measure by authorizing benefits for sickness in specified circumstances. By this tricky device the principle of health insurance, after rejection on its merits in the Legislature, would be sneaked into the statutes in the guise of expanded unemployment benefits.

This is not the first time the friends of state medicine have employed devious routes to attain goals denied them in honest combat. Sectarian healing cults use the same tactics. Chiropractors, naturopaths, physical therapy technicians, and others have repeatedly tried to tack sly amendments on to the Medical Practice Act to enable them to "muscle in" on the lawful practice of medicine.

The antitrust suit against the A.M.A. is the most glaring example in recent years of legal acrobatics to accomplish legislative purposes. As the *Indianapolis Star* has observed: "The feeling persists that the Department of Justice crusade against the national medical organization may have been prompted less by alleged restraint of 'trade' than for the purpose of destroying the . . . independence of the medical profession." Congress did not grant the Administration statutory power to control medical practice, so Mr. Thurman Arnold conceived the bright idea of applying the shackles via the Sherman Antitrust Act—a law never intended to apply to medical practice.

There are apparently more ways than one of effecting legislative aims and the enemies of the existing system of medical practice know all the tricks of the trade. It is to be hoped that neither the State Legislature nor Congress will fall for backhanded attempts to put over revolutionary medical principles found unacceptable when presented in their true guise.

Editorial Notes

Due to the impending increase in cost of paper THE JOURNAL has advanced to its publishers a sufficient sum to cover that item for the rest of the year. Just one instance of the increase in prices attributable to the war situation.

* * *

Blood transfusions, now a routine procedure in many of our hospitals, was practised a long time ago, as evidenced by a comment in the New Harmony *Gazette* for May 14, 1828. This refers to an item in the Boston Medical Journal in which a Dr. Channing reports four successful cases of blood transfusions, each of these patients having suffered a severe hemorrhage.

* * *

Dr. John Taylor Frothingham, Major-General in the Canadian Army Medical Corps, died at his home in Toronto in May. Soon after his graduation in medicine, he began the organization of a medical corps for the Canadian army. This organization achieved signal success during the World War, due chiefly to the foresight of Dr. Frothingham.

* * *

Willis S. Blatchley, for many years state geologist and one of Indiana's leading naturalists, died recently at his Indianapolis home at an advanced age. A native Hoosier and a product of our state educational system, Dr. Blatchley was generally recognized as an authority in matters pertaining to his field. He did much to establish our present knowledge of geological Indiana, his writings on this subject continuing to be accepted in every quarter.

* * *

John R. Kissinger, an Indiana resident, recently received a medal from the government of Cuba commemorating the part he played in the discovery of the cause and transmission of yellow fever. It will be recalled that Kissinger volunteered for the experiments that led to this discovery along about the time of the Spanish-American War, and that the discovery has led to the practical banishment of the disease from tropical and semi-tropical regions.

Members especially interested in venereal diseases and the many problems pertaining thereto will find of much interest the monthly publication *Venereal Disease Information* issued by the U. S. Public Health Service. The annual subscription fee is fifty cents and those interested may address their order to the Superintendent of Documents, Government Printing Office, Washington, D. C.

* * *

According to the U. S. Bureau of the Census, the death rate for 1939 showed an increase over that of recent years, the rate for 1939 being 10.7 per 1,000 estimated population. For 1938, the rate was 10.6. In Indiana, the death rate for 1939 was 11.4 as against 11.1 in 1938. Arizona with 14.2 had the highest rate in the entire country and North Dakota, with 7.7, had the lowest.

* * *

The 1940-1941 edition of *Who's Who in America*, issued within recent weeks, contains additions of 52 Hoosiers, eight of whom are physicians. They are: Drs. Henry F. Beckman, C. O. McCormick, George S. Bond, Verne K. Harvey, Henry O. Mertz, James O. Ritchey, and Matthew Winters of Indianapolis, and Dr. Herman M. Baker of Evansville.

* * *

The New Harmony *Register* for May 9, 1874, states that the New York *World* had figured the weight of a lady's complete toilet, from her hair to her shoes, the sum total of which amounted to eleven pounds, thirteen ounces, and eight drachms. From our observations, it seems obvious that in the intervening sixty-six years women have discarded something more than eleven pounds of this, to her, excess baggage.

* * *

Terry M. Townsend, an Indiana boy and a protege of our own William Niles Wishard, M.D., retires from the presidency of the Medical Society of the State of New York after a most strenuous year of activity. During the past year he covered the entire state, addressing medical and lay groups, arranging his subjects to suit the occasion and the audience. The State Society, sensing their importance, printed practically all of these addresses in their weekly publicity bulletin. We read many of these addresses and were impressed by all of them, but one outstanding talk on "Choosing Your Doctor," appealed to us as being about the best thing we had read in many a year; it deserves a place among the classics in medical writing.

* * *

Dr. R. A. Vonderlehr, Assistant Surgeon General of the U. S. Public Health Service, declares that "Within one year the shadow of syphilis can be lifted from our children if the mothers of America cooperate wholeheartedly and if the health agencies are allowed to use to the fullest extent modern weapons to fight syphilis." He further states that each year more than 25,000 babies die of syphilis, either at or before birth, or within the first year of their lives, and that about 60,000 more babies are born alive but infected with "the pale germ of syphilis." It might be well to remember that Indiana has a new law, effective March first of this year, to cover just such matters. The law *requires* that *all* pregnant women be subjected to a serological examination and that those found to be positive be given proper treatment.

* * *

INDIANA MEDICS LEAD

The alacrity and enthusiasm with which the American Medical Association adopted at its New York convention a plan originating in Indiana is a tribute to the farsightedness and patriotism of Hoosier physicians and surgeons. A resolution calling for the perfection of a program that would enable the medical profession to mobilize quickly in the event of national need was adopted at the meeting of the Indiana State Medical Association in Ft. Wayne last fall. A committee worked out the details and has been functioning since the first of the year. The A. M. A.'s house of delegates adopted the proposal, with special reference to Indiana's foresight in preparing for national emergencies. Approval of the plan carried a well-deserved tribute to Indiana's physicians.

* * *

The Indianapolis City Hospital recently dedicated its new medical library, principally the gift of Eli Lilly and Company. During the course of the dedicatory ceremonies William Niles Wishard, M.D., remembered by all Hoosier medics as the "Grand Old Man of Indiana Medicine," presented to the library the autobiography of Harvey W. Wiley, well remembered as the crusader of better and purer foods and the sponsor for practically all food and drug legislation for many decades. Dr. Wishard, it might be remembered, served as superintendent of this hospital from 1879 to 1887 and his interest in the institution has been maintained through all the intervening years.

* * *

The anti-noise group seems determined in their efforts to prevent the unnecessary din that is common in most of our communities, according to an article in *Hygeia* for May. Most progressive cities have various ordinances covering these cases but it seems that the trouble lies in the fact that the city laws are not enforced. The writer of the article declares that while it commonly is believed that one gets used to noise of various kinds, "it leaves its mark on our health and efficiency." The impatient automobile driver who toots his horn

lustily on any and all and no occasion, comes in for justifiable criticism, and there are numerous other factors to account for a large per cent of the din that may as well be eliminated. In pilgrimages to the North Woods, far away from all din and clatter, we experience a sense of absolute rest not found elsewhere, all because of the utter lack of the disturbing noises of modern civilization.

* * *

The "Sane Fourth" bill, enacted by the 1939 General Assembly, becomes effective for the first time this year. Most physicians are quite familiar with the long list of casualties due to fireworks of various kinds and are hopeful that the new law will effect a material reduction in the number of these cases. As is true with all other "anti" legislation, the wholesome effects of the law will depend entirely upon the degree of its enforcement, and we trust that this is one law that will be enforced to the very letter. Too long have we had many of our people, chiefly young folk, permanently disabled from the careless use of these explosives.

* * *

The "five-day treatment" of syphilis, so widely heralded in the lay press, brings forth a response from Walter A. Clarke, M.D., executive director of the American Social Hygiene Association. Dr. Clarke declares that while the treatment as devised by a group of Eastern physicians seems to have much merit, we should bear in mind that its originators make no claims for it other than those set forth in their preliminary report. A short cut in the treatment of syphilis is a thing much to be desired and, as pointed out by Dr. Clarke, it was at first thought that Ehrlich's "606" was the answer. It is true that it very materially added to our treatment of this disease, but it was not the long-sought answer. We recommend that physicians proceed slowly in adopting this latest innovation and await such time as will be required to prove its worth.

* * *

It now looks as if the Indiana berry crop, referring to the delectable strawberry, might again come into its own. Some two or three decades ago train loads of this fruit left the Floyd County Knobs region every evening, to be delivered in city markets as far away as Chicago the following morning. Somehow or other Michigan edged in on the market and all but took it away from southern Indiana. Now, however, strawberry lovers have again become acquainted with the Indiana product and there is a lively demand for it. This reminds us of a statement recently made by one of the largest grocery wholesalers in the Chicago area, to the effect that Indiana tomatoes "had the call"; he said that they were demanded by the better retail trade and that local stores had found it good business to advertise Indiana tomatoes. We repeat the statement that Indiana grows more and better tomatoes than any other state in the Union; and Indiana packs more tomato juice than any other state.

* * *

The great majority of the younger group now in practise will not be materially interested in some statistics regarding the prevalence of typhoid fever in this country during 1939, but to the old timer these figures will bring back memories of the days when this affliction was commonly met, in both city and country communities. Well do we recall the days when in the local hospital there were to be found twenty or more cases, particularly during the fall season. Typhoid deaths in 1939, for the entire nation, dropped to the extremely low figure of 265; in 1938 the total was 291. Fort Wayne has not had a death from this cause in five years, while South Bend has gone along for four years without such a fatality. This record is an outstanding achievement for the profession of medicine since in the memory of many living, practising physicians, the death rate from typhoid fever was so high as to be alarming. And it might well be remembered that there is no occasion for any deaths from this cause, since typhoid is an absolutely controllable disease.

* * *

The committee on conservation of vision, one of the most active groups in the State Medical Association, is making plans for a concerted effort to complete a survey into the extent and the causes of defective vision among Indiana residents. This committee seeks to go further with their plans, having asked the American Medical Association to partake in a similar action throughout the country. That such a survey will be of inestimable value is generally known and the fact that many visual defects, if discovered and treated during the early years of these defectives, can be cared for and good vision restored, should serve as an added impetus to the plan. Modern industry demands good vision on the part of all employes and visual tests play a prominent part in all employment examinations. Ophthalmologists in our industrial centers continually are having calls from such applicants who for years have neglected their eyes, even though they knew their vision was not up to par. In too many of these cases corrective measures are of little or no avail, but if the case had been seen during the formative years of childhood, the conditions might have been corrected.

* * *

Numerous Indiana physicians operate motorboats on our lakes and rivers during the vacation season, and perhaps most of them are familiar with the

Indiana laws regarding the operation of such craft. However, it may be quite in order to refer to an editorial note in the Indianapolis *News* of June tenth regarding this matter:

"The sputtering of an outboard motor is music to the ears of a speed enthusiast, but it violates the law, and residents along the banks of White river are complaining. The sheriff has called attention to a law of 1913 requiring that all motor boats must be equipped with mufflers. That law also fixes the speed of power boats at not more than ten miles an hour between sunset and sunrise.

"In 1931, the general assembly barred motor boats from all lakes of less than 325 acres, between April 1 and June 15, and restricted their speed to ten miles an hour at all times on lakes of this size. The 1937 assembly approved a blanket act prohibiting any boat speed that endangers life or property, and placing enforcement in the hands of state policemen and game wardens.

"All boats with motors that develop twenty-five-horse power or more must be registered with the secretary of state, under provisions of a 1939 law. Each is assigned a license number which must be displayed. The licenses are valid for the life of the boat or until it changes hands. Operating a power boat while under the influence of intoxicants or narcotics may be punished by a fine and jail sentence."

* * *

The Evansville *Courier*, commenting on the one hundredth annual meeting of the Illinois State Medical Society held in Peoria in May, says:

When the Illinois State Medical Association celebrates its 100th anniversary on May 21, the program will include special tribute to the country doctor of 1840 and the part he played in building Illinois into a great commonwealth. They did more in those days than care for the sick.

"As busy as they were," says Dr. J. H. Hutton, president of the society, "and they often traveled on horseback among the sick of half a dozen counties, the early Illinois men of medicine found time to lay out town sites, install systems of education, start industries and businesses, provide churches and then preach in them, edit and print newspapers and serve in public office."

Dr. John Todd, uncle of Mary Todd Lincoln, was the society's first president. He and his fellow-founders organized their groups in order to provide a common interchange of knowledge in their fight against disease. They must have been successful, for the life expectancy in Illinois has increased in the century from forty to sixty years, and various epidemics and diseases familiar in those days have been eliminated.

The doctors today grant the first 100 years may have been the hardest, but they are determined that the next 100 years of medicine shall bring "ever-richer dividends in public health."

* * *

The United States Court of Appeals, Tenth District, has handed down a decision of far-reaching significance in the case of the Kansas State Osteopathic Association vs. W. H. Burke, Collector of Internal Revenue, State of Kansas. In this opinion the court held that osteopaths in Kansas cannot sell, use, or distribute narcotic drugs for any purpose. The case originally was filed in the United States District Court for the District of Kansas and the presiding judge held in favor of the osteopaths. An appeal was taken by the District Internal Revenue Collector and it was upon this hearing that the case was decided by the upper court. From a non-legal reading of the complete decision it would seem that the upper court held that the use of narcotics, under the Harrison Act, was limited to practising, registered *physicians*. The osteopathic group, declaring that they were *osteopathic physicians*, came under this classification. Excerpts from the ruling are of more than passing interest, as "osteopathy, when practised by a physician or surgeon, as is defined in section 65-1005, may be and probably is a part of the science of healing, but the practise of osteopathy, while it may be a part of healing, is not comprehended within the term 'practising medicine,' nor within the term 'surgical operation' as used in section 65-1005 of the Revised Statutes. Section 65-1508 of the Revised Statutes, providing that nothing in the optometry act shall be construed as preventing regular registered physicians and surgeons from practising optometry, does not include those registered to practise osteopathy." Numerous similar comments are made throughout the rather lengthy and comprehensive decision, all making it very clear that osteopathy is just that, and nothing more. Just what effect this decision will have in other states, where regularly licensed osteopaths seemingly have little trouble in obtaining narcotics through the regular channels, remains to be seen. The decision appears, in full, in the April number of the *Journal of the Kansas State Medical Society*, page 176.

* * *

BE SURE TO RETURN THE COMPLETED M-DAY QUESTIONNAIRE. SEE INSERT IN THIS ISSUE

AMERICAN MEDICAL ASSOCIATION—REPORT OF ANNUAL MEETING IN NEW YORK CITY, JUNE 10-14, 1940

MEDICAL PROFESSION PREPARES FOR MILITARY EMERGENCY

HOMER G. HAMER, M.D.
Indianapolis

M-Day Resolution

The principal interest of the session of the House of Delegates of the ninety-first annual meeting of the American Medical Association centered about the movement towards medical preparedness. Indiana had the honor to participate through the introduction of a resolution by Dr. George Dillinger. This resolution was in accord with the action taken last fall by the Indiana State Medical Association at Fort Wayne which created an M-Day committee that has been functioning in Indiana since the first of the year. Indiana was commended for this early action and progress in preparedness.

The Indiana resolution was in line with a comprehensive plan, worked out in the office of the Surgeon-General of the U. S. Army for mobilization of physicians and surgeons in the event of a national emergency, which was offered by Lieut.-Colonel G. C. Dunham, delegate for the Army, and another resolution by the Board of Trustees of the A.M.A.

By action of the House of Delegates, the entire facilities of the A.M.A. were placed at the disposal of the federal government for the purpose of defense plans.

Volunteer Medical Corps

In cooperation with the medical corps of the U. S. Army, the membership of the A.M.A. will be asked to join a volunteer medical corps to be organized through the component county and state Medical Societies.

The physicians and surgeons of the volunteer corps will then be divided into two groups—those found able to serve the military forces and those who because of physical disability or commitment in civil service should remain at home to serve their respective communities.

To set the mobilization plan in motion at once, it was voted to create a committee composed of ten members from the House of Delegates and five officers of the Association to establish and maintain contact and suitable relationship with all governmental agencies concerned so as to make available at the earliest possible moment every facility the A.M.A. can offer. The members of this committee are Dr. Irvin Abell, Louisville, Kentucky, chairman; Dr. Stanley H. Osborn, Hartford, Connecticut; Dr. Walter G. Phippen, Salem, Mass.; Dr. Harvey B. Stone, Baltimore; Dr. James E. Paullin, Atlanta, Georgia; Dr. Fred W. Rankin, Lexington, Kentucky; Dr. Roy W. Fouts, Omaha, Nebraska; Dr. Sam E. Thompson, Kerryville, Texas; Dr. Charles A. Dukes, Oakland, California; and Dr. John H. O'Shea, Spokane, Wash. The five ex-officio members are: the president, Dr. Nathan B. Van Etten, New York City; the secretary, Dr. Olin West, Chicago; chairman of the Board of Trustees, Dr. Arthur W. Booth, Elmira, N. Y.; secretary of the Board of Trustees, Dr. Austin A. Hayden, Chicago, and editor of the Journal of the A.M.A., Dr. Morris Fishbein.

Eligibility for Membership in A.M.A.

The House of Delegates approved a proposed amendment to the constitution providing that only doctors of medicine licensed to practice in their county and state shall be eligible for membership in the Association. The amendment must be passed a second time at next year's meeting to become effective. If adopted, it will exclude osteopaths from membership.

Hospital Construction Program

In a resolution relating to the Wagner-George Bill, providing for a $10,000,000 construction program for small hospitals in various parts of the country, the house recommended that the hospitals be built only in communities where actual need can be shown, and where local government units can demonstrate their ability and willingness to maintain the institutions when built.

The House also voted that "The amendment providing for osteopathic representation on the Council (for hospitals) is entirely unwarranted and should be eliminated from the bill."

The House urged that each state association create a special committee to act in an advisory capacity to State Health Departments on any hospital construction projects that may be contemplated under pending legislation, and that the special committee appointed by the House of Delegates last year be continued so as to be on call by the President of the United States or other governmental authorities.

National Neuropsychiatric Institute Not Approved

A resolution, introduced by the Section of Neuropsychiatry, at the request of Surgeon General Thomas Parran, of the United States Public Health Service, asking that the House endorse the establishment of a national neuropsychiatric institute, similar to the National Cancer Institute, by the Federal Government, for the purpose of

carrying on research on nervous and mental diseases, failed to receive the two-thirds majority required.

A.M.A. Indictment to Be Vigorously Defended

The House voted to exhaust all possible efforts to defend the A.M.A. against indictment by the Federal Government and to secure complete acquittal under charges of conspiracy and violation of the Federal Anti-trust Law.

Committee on Conservation of Vision Appointed

A resolution asking for the creation of a national committee on conservation of vision was in accord with a recommendation by the Indiana Committee on Conservation of Vision. The resolution was presented by Dr. D. H. Row, of Indianapolis, before the Section on Ophthalomology. The resolution, which was approved by the Section and then approved by the House of Delegates of the A.M.A., creates a national committee appointed by the Section on Ophthalmology; the committee is to work under the direction of the Board of Trustees.

Miscellaneous Resolutions

Other resolutions acted upon favorably by the House are:

Approval of the establishment of medical museums throughout the country similar to that at the New York World's Fair.

To coordinate proposed plans for the distribution of medical care.

Creation of a new section on Anesthesiology.

Award of Distinguished Service Medal

The distinguished service medal was awarded to Dr. Chevalier Jackson, of Philadelphia.

Indiana Physician Receives Affiliate Membership

Dr. T. A. Hays, Burns City, Indiana, was elected to affiliate membership.

* * *

Reapportionment of delegates as required every third year was upon the basis of one delegate to each 900, or fraction thereof, members.

An amendment to the constitution and by-laws was adopted, making it unprofessional to accept remuneration from patents.

Drs. Irvine H. Page, K. G. Kohlstaedt, A. C. Corcoran, O. M. Fouts, and G. F. Kempf, of the Indianapolis City Hospital, received honorable mention on their exhibit on "Nature of Hypertension."

New Officers

President—Nathan B. Van Etten, New York.

President-elect—Dr. Frank Howard Lahey, Boston.

Vice-president—Dr. Parke G. Smith, Cincinnati, Ohio.

Board of Trustees—Dr. William F. Braasch to fill the vacancy created by the death of Dr. Charles B. Wright whose term would expire in 1943; Dr. Ralph A. Fenton, Portland, Oregon, and Dr. James R. Bloss, Huntington, West Virginia, were re-elected as trustees.

Treasurer—Dr. Herman L. Kretschmer, Chicago.

Speaker of the House of Delegates—Dr. H. H. Shoulders, Nashville, Tennessee.

Vice-speaker—Dr. Roy W. Fouts, Omaha, Nebraska.

Future Meetings

San Francisco was chosen as the place of meeting for 1943. The 1941 meeting will be held at Cleveland, Ohio, and in 1942 the meeting will convene in Atlantic City.

Indiana Delegates present were Drs. F. S. Crockett, George Dillinger, H. G. Hamer, and Don Cameron.

Dr. George Dillinger introduced the Mobilization Day resolution from the Indiana State Medical Association and served on the Committee on Credentials. Dr. F. S. Crockett was chairman of the Reference Committee on Legislation and Public Relation.

* * *

Indiana members who registered at the convention are:

Banks, H. M., Indianapolis
Barnett, W. E. Logansport
Baxter, Neal E., Bloomington
Beeler, R. C., Indianapolis
Beverland, M. E., Indianapolis
Bland, Curtis, Terre Haute
Blum, Leon L., Terre Haute
Bohner, C. B., Indianapolis
Boyd, D. A., Jr., Indianapolis
Bowers, J. W., Fort Wayne
Bowser, H. Philip, Goshen
Browning, J. S., Indianapolis
Bulson, E. L., Fort Wayne
Burkhart, A. E., Tipton
Butterfield, R. M., Muncie
Cameron, Don F., Fort Wayne
Carman, L., North Manchester
Carter, F. R. N., South Bend
Casey, Stanley M., Huntington
Catlett, M. B., Fort Wayne
Chen, K. K., Indianapolis
Clarke, Elton R., Kokomo
Cole, R. E., Muncie
Combs, C. N., Terre Haute
Copeland, G. W., Vevay
Corcoran, A. C., Indianapolis
Courtney, T. E., Indianapolis
Covalt, Donald A., Muncie
Crimm, Paul E., Evansville
Cring, George V., Portland
Dearmin, R. M., Indianapolis
Dillinger, G. R., French Lick
Dodds, W., Crawfordsville
Dollens, Claude, Oolitic
Dugan, T. J., Indianapolis
Ebert, J. Wayne, Indianapolis
Faltin, L., South Bend
Ferguson, A. N., Fort Wayne
Fish, C. M., South Bend
Foreman, H. L., Indianapolis
Forster, N. K., Hammond
Freeman, Floyd M., Goshen
Gante, Henry W., Anderson
Garceau, G. J., Indianapolis
Gates, G. E., South Bend
Giordano, A. S., South Bend
Gray, Paul M., Huntington
Gladstone, N. H., Fort Wayne
Glock, H. E., Fort Wayne
Graham, A. B., Indianapolis
Gray, Edwin F., Terre Haute
Groman, H. C., Hammond
Gustafson, G. W., Indianapolis
Habich, Carl, Indianapolis
Hall, Orville A., Muncie
Hamer, H. G., Indianapolis
Harcourt, A. K., Indianapolis
Hardy, John J., North Liberty
Harris, Carl B., Indianapolis
Harstad, C., Rockville
Harvey, V. K., Indianapolis
Hawk, James H., Indianapolis
Held, A. H., Huntingburg
Hendricks, T. A., Indianapolis
Hines, Don C., Indianapolis
Hippensteel, R., Indianapolis
Hochhalter, M., Logansport
Holland, E. E., Richmond
Howard, W. H., Hammond
Inlow, W. D., Shelbyville
Johnson, S. L., Evansville
Jones, A. T., Michigan City
Kahler, M. V., Indianapolis
Kammer, A. G., East Chicago
Kempf, G. F., Indianapolis
Kennedy, Samuel, Shelbyville
King, Bernard A., Anderson
King, Joseph W., Anderson
Klingler, M. E., Garrett
Kobrak, H. G., Gary
Kohlstaedt, K. G., Indianapolis
Kraft, Bennett, Indianapolis
Kuhn, Hugh A., Hammond
Kunkler, Wm. C., Terre Haute
Kwitny, I. J., Indianapolis
Lapenta, V. A., Indianapolis
Leventhal, George, Marion
Liston, M. E., South Bend
Lyon, M. W., Jr., South Bend
Lyon, Martha B., South Bend
Lyons, R. E., Jr., Bloomington
MacGregor, D. E., Indianapolis
McCarty, Virgil, Princeton
McCormick, W. C., Terre Haute
McMeel, J. E., South Bend
Mettel, H. B., Indianapolis

(Continued on page 379)

EXCERPTS FROM THE ADDRESSES OF PRESIDENT VAN ETTEN AND PRESIDENT-ELECT LAHEY BEFORE THE HOUSE OF DELEGATES AT THE NEW YORK SESSION OF THE A.M.A.

In his talk to members of the House of Delegates, Dr. Van Etten made these statements:

"Again the horrors of fratricide of even wider dimensions stir our emotions; again the uncertainties of the continuation of our civilization present a confusing prospect. After long preparation of a new generation of people, through education in paganistic ideologies, intolerance, persecution and brutal expulsion of nonconformists; after reversions from limited democracies to autocracies of the most violent types the pagans are marching, destroying peaceful homes and murdering inoffensive civilian neutrals in an effort to gain world domination. Again the medical profession in America is being mobilized to defend our liberal democracy against the invasion of foreign influences. . . .

". . . The American Medical Association has already offered all of its organizational facilities to the federal government and stands ready to cooperate to the limit of its ability in all measures of national defense. If we must enter a new war as combatants, we shall do so whole heartedly.

"Love of country is a noble passion, but loss of the strong position of organized medicine in the United States would be deplorable and in the midst of this excited moment we must not lose sight of our patriotic ideals for the health and happiness of our people. We must not lose sight of the dangers to medical practice through concentrations of federal authority. Regimentation is a word which has been so greatly overworked that we shrink from its frequent use. We do not like the sound of totalitarianism. The thought of dictatorship in America is revolting. And yet appeals to popular emotion under the egis of patriotism, of social security, of pensions, of welfare, of relief of unemployment or of the people's health have carried many people from confidence in their ability to take care of themselves to belief that they have no personal responsibility for providing the sources of paternalism which they expect to enjoy. They believe that they will drink forever from the inexhaustible well springs of government. Dictatorships are built on such public sentiment. If such sentiments prevail, the medical profession may well expect a fate similar to that which developed in Germany and reduced the physician to a very low place in the social scale.

"In conformity with the best traditions of this organization at the first intimation of the possible involvement of the United States in a wide struggle with ruthless paganism, the American Medical Association offered all of its organizational resources to the Government. In the office of the Association there is filed the personal history and the medical history of every medical student and every physician of the United States. Here only is the recorded competence and character and availability of those who may be called to the medical defense of our country. Defense against disease is quite as important as defense against a foreign enemy. Defense against the destructive invasion of our democratic ideals is an immediate concern of all Americans. This afternoon the House of Delegates responded unanimously to the request of the Government for preparedness of the American Medical profession and has erected the machinery to put it into immediate operation.

"The pagans are marching over the democracies of the world, destroying their religious and their civic ideals and substituting therefor the irreligious nihilism of force.

"This has been so dramatically illustrated today that all Americans must be convinced that we have arrived at a time and at a place when the sanctity of our national life is threatened, and if we cherish it we must fight for it with all our strength."

PRESIDENT-ELECT FRANK H. LAHEY, in addressing the A.M.A. House of Delegates, said this:

"I realize fully the magnitude of Dr. Van Etten's undertaking, and I equally realize what the magnitude of the undertaking may be for all of us in these times that can be characterized as little less than an emergency. I feel very strongly that if we view these times as an emergency we make only the mistake of exaggeration, for which the penalty is little, but if we view them as less than an emergency, we make the mistake of minimizing them, for which the penalty may be tremendous.

"I hope as we approach this very serious problem that we can smooth out and eliminate at least in terms of a truce or a moratorium the difficulties which have beset medicine, at least until we can face and meet this emergency and overcome some of these difficulties which are so apparent at the present time. It would be wrong for me not to express my personal opinion that we can so overcome them and so harmoniously deal with the situation that other lines of endeavor will be prompted to emulate us, not the least important of which is government."

RESOLUTION ON MEDICAL PREPAREDNESS INTRODUCED BY DR. ARTHUR W. BOOTH, CHAIRMAN, FOR THE BOARD OF TRUSTEES, A.M.A.

"WHEREAS, The ravages of war again pervade many of the nations and peoples of the world; and

"WHEREAS, The President of the United States has indicated to the nation and to the Congress the

desirability of military preparedness so that our people may successfully resist attempts to substitute other forms of government for the democracy established by the Constitution of our country; and

"WHEREAS, Organization of the nation for preparedness involves from the first the complete cooperation of the physicians of the country for

"1. Medical services in the Military, Naval, Aviation and Veterans' administrations:

"2. Selection of men physically fit to serve with such agencies; and

"3. Rehabilitation of those not physically qualified to enable them to participate in military activities; and

"WHEREAS, Preparedness demands also

"1. Medical service to the industrial workers engaged in war industries;

"2. Continuance of medical care of the civilian population;

"3. Education of young men to qualify them for medical service; and

"WHEREAS, The American Medical Association now embraces in its membership more than 117,000 of the licensed physicians of the United States; and

"WHEREAS, The headquarters facilities of the American Medical Association has available

"1. Complete records of all qualified physicians in this country, with data necessary to determine largely their availability for military or other services;

"2. Complete information concerning facilities for education in medicine, the medical specialties and other medical activities;

"3. Complete information concerning the hospitals of the United States;

"4. The necessary facilities for making prompt contact through addressing devices, periodicals and constituent bodies with all medical personnel and medical agencies; and

"WHEREAS, Only in the headquarters of the American Medical Association, as far as is known, are such information and facilities available; and

"WHEREAS, The American Medical Association is not only the largest but also the only organization containing in its membership qualified physicians in every field of medical practice; and

"WHEREAS, During the World War of 1914-1918 the American Medical Association aided in making available the services of more than 60,000 physicians for military and related activities; therefore, be it

"*Resolved*, That the House of Delegates authorize the Board of Trustees to create a Committee on Medical Preparedness, to consist of seven members of this House, with the President of the Association, the Secretary of the Association, the Secretary of the Board of Trustees, and the Editor as ex officio members; and be it further

"*Resolved*, That this committee establish and maintain contact and suitable relationship with all governmental agencies concerned with the prevention of disease and the care of the sick, in both civil and military aspects, so as to make available at the earliest possible moment every facility that the American Medical Association can offer for the health and safety of the American people and the maintenance of American democracy."

INDIANA REGISTRANTS AT A.M.A.

(*Continued from page* 377)

Miller, Carl G., Fort Wayne
Mitchell, A. M., Terre Haute
Mitchell, R. E., Indianapolis
Montgomery, Lall G., Muncie
Moser, R. H., Indianapolis
Mozingo, A. E., Indianapolis
Murphy, J. F., South Bend
Nafe, Cleon A., Indianapolis
Napper, Floyd S., Scottsburg
Nesbit, Leonard L., Anderson
Niblick, J. S., East Chicago
Norman, W. H., Indianapolis
O'Rourke, Carroll, Fort Wayne
Osterman, L. H., Seymour
Padgett, E. E., Indianapolis
Pierce, H. J., Terre Haute
Province, Oran A., Franklin
Quickel, D. S., Anderson
Reiss, Jack, Indianapolis
Rhamy, B. W., Fort Wayne
Ropp, H. E. New Harmony
Rosenheimer, G., South Bend
Ross, Harry P., Richmond
Rothberg, M., Fort Wayne
Royster, Hollace R., Frankfort
Ruddell, Karl, Indianapolis
Sensenich, R. L., South Bend
Simmons, J. F., Cambridge
Simon, A. R., LaPorte
Simpson, Morrell, Bedford
Souter, Martha, Indianapolis
Spalding, W. L., Mishawaka
Spangler, Jesse S., Kokomo
Stern, S. Lewis, Hammond
Stewart, G., Fort Wayne
Strange, J. W., Loogootee
Stygall, J. H., Indianapolis
Teal, Dorothy D., Columbus
Thornton, H. C., Indianapolis
Tindall, W. R., Shelbyville
Tinney, Wm. E., Indianapolis
Treon, James F., Aurora
Turner, Robert D., Muncie
Underwood, G. B., Evansville
Van Buskirk, E. M., Fort Wayne
Viney, Charles L., Logansport
Wagoner, G. W., Burrows
Weaver, W. W., New Albany
Webb, John W., Indianapolis
Weidner, M. R., Jr., Hammond
Weigand, C. G., Indianapolis
Weyerbacher, A., Indianapolis
Whitlock, M. E., Mishawaka
Wilson, L. A., Michigan City
Wisch, Louis J., Whiting
Wise, Charles L., Camden
Wishard, W. N., Jr., Ind'p'l's
Wygant, M. D., Mishawaka
Wyland, B. J., Mishawaka
Yoder, A. C., Goshen

YOU ARE URGED

TO TEAR OUT, COMPLETE

AND MAIL THE BLUE

INSERT SHEET IN THIS

JOURNAL. DO IT NOW.

President's Page

THE TWELVE GREAT KILLERS—IN AMERICA THE GREATEST OF THESE STILL IS HEART DISEASE

In view of the tragedy which is sweeping Europe, carrying its threat to the civilized world, the Indiana medical profession may be thankful at this particular time that we can devote our energies and mobilize our forces against the twelve killers without having to divert those energies to combat the greatest killer in the world today—war. Hence, we are pleased to be able at this time to congratulate the Bureau of Publicity of the Indiana State Medical Association upon the series of articles which it is releasing this summer to the press of the State in regard to the twelve leading "killers" in Indiana: (1) Heart Disease, (2) Cerebral Hemorrhage, (3) Cancer, (4) Accidents, (5) Pneumonia, (6) Nephritis, (7) Arteriosclerosis, (8) Tuberculosis, (9) Suicide, (10) Diabetes Mellitus, (11) Influenza, (12) Infant Diarrhea. To date, the series has included seven articles upon heart disease, two articles upon cerebral hemorrhage, and one article upon cancer.

We wish to express our thanks to the editors and the newspaper publishers of Indiana for their wholehearted cooperation in publishing and commenting favorably upon these articles. Insofar as possible, these articles are prepared with an optimistic standpoint, deliberately avoiding the fear element, but in all cases pointedly adhering to the scientific facts and scientific reasoning as much as it is possible to translate these facts into language that the lay public can understand.

In viewing these twelve killers and the mortality rates produced by them, we cannot help "pointing with pride" to the fact that here in America, where we maintain a system of free medical service as opposed to the system of state-controlled medicine practiced in the totalitarian states, the death rates are less than in Europe. As an example, the following comparative figures as presented in a pamphlet from the National Physicians' Committee are most reassuring:

DEATHS FROM DIPHTHERIA FOR EACH 100,000 POPULATION:

United States Cities	
1928	9.2 deaths
1936	1.5 deaths
English Cities	
1928	9.3 deaths
1936	8.6 deaths
German Cities	
1928	9.2 deaths
1936	11.5 deaths

The Indiana profession is doing its utmost to combat these twelve killers and pledges its service to the public in the attack upon these enemies. In the meantime, it is preparing to the best of its ability to meet, with all the resources at its command, if the emergency should come, the greatest of all killers—war.

Karl R. Rudisill

MARSHALL COUNTY MEDICAL SOCIETY'S PUBLICITY PROGRAM

T. C. ELEY, M.D.
PLYMOUTH

At the January meeting of the Marshall County Medical Society, a Publicity Committee was appointed. The function of this committee was to try in some way to combat the damage being done by the advertising of chiropractors and cultists, to acquaint the people with the dangers of socialized medicine, and to bring to the public's attention the work that is being done by the doctors of the country.

It was decided by the committee, at its first meeting, to carry on a newspaper campaign. The subjects to be written about were discussed and decided upon and a secretary was appointed whose duty it was to see the editors of the two daily and four weekly newspapers of the county and obtain their cooperation. It was his further duty to see that the copy of the topic for each week reached the committee on time, that it was censored, and duplicates made for the papers.

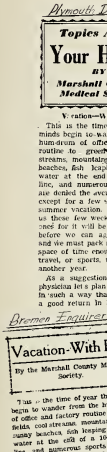
The first list of subjects that the committee has decided upon is as follows:

1. The New Marriage Law.
2. The Wassermann Test in Pregnancy.
3. Pneumonia.
4. Heart Diseases.
5. Dangers of Raw Milk.
6. Socialized Medicine.
7. The Value of a Laboratory.
8. Own Hospital Important to Community.
9. Pre-School Round-Up.
10. Vacation Time.
11. Summer Poisons.
12. Anti-Tetanic Serum.
13. Allergy—Hay Fever—Asthma.
14. Medical Superstitions.
15. Indiscriminate Use of Drugs.

When these subjects have all appeared in the papers the committee will meet and make a new list to be assigned. Each doctor of the county society is asked to write upon one of these topics, preferably choosing one that he is especially interested in.

The only complaint from the readers concerning these articles has been that the article was difficult to find because of the change of location in the newspapers every time. It was decided, therefore, to have a uniform heading for the articles to see if that would solve the problem. Paper mats were supplied to all the papers, and they have been used very successfully.

In this program of the medical society the Publicity Committee has had one hundred per cent cooperation from the physicians and the newspapers. The doctors have willingly given their time and the newspapers have very generously given us the space in their papers and offered many valuable suggestions.

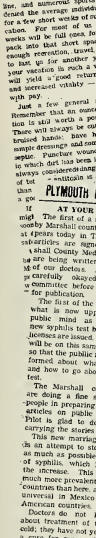

Plymouth Daily Pilot

Topics About
Your Health
BY
Marshall County
Medical Society

Vacation—With Pay.

This is the time of year that minds begin to wander from the hum-drum of office and factory routine to green fields, cool streams, mountains, lakes, sunny beaches, fish leaping from the water at the end of a 100-foot line, and numerous sports that are denied the average individual except for a few short weeks of summer vacation. For most of us these few weeks will be full ones for we must pack into that short space of time enough recreation, travel, or sports, to last us for another year. Plan to let up for another year. Plan your vacation in such a way that it will yield a good return in health and increased vitality — a vacation with pay.

Just a few general suggestions: Remember that an ounce of prevention is still worth a pound of cure. There will always be cut fingers and bruised hands; have handy a few simple dressings and some good antiseptic. Puncture wounds or wounds in which dirt has been introduced are always considered dangerous. A shot of tetanus antitoxin is much cheaper than a long stay in the hospital or a good funeral.


Bremen Inquirer

Vacation-With Pay

By the Marshall County Medical Society.

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PLYMOUTH DAILY PILOT

AT YOUR SERVICE.

The first of a series of articles [illegible] by Marshall County physicians appearing in The Pilot. These articles are signed by the Marshall County Medical Society, but are being written by a number of our doctors. All articles are carefully okayed by a special committee before being released for publication.

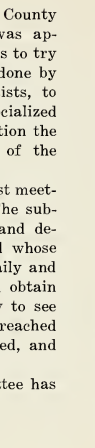
The first of the series concerns what is of importance to the public mind as to health—the new syphilis test before marriage licenses are issued. Other articles will be on this same subject later, so that the public may be well informed about what is required and how to go about getting the test.

The Marshall county doctors are doing a fine service to our people in preparing this series of articles on public health. The Pilot is glad to do its part by carrying the stories to the public.

This new marriage license law is an attempt to stop, or control as much as possible, the ravages of syphilis, which has been on the increase. This disease is much more prevalent in European countries than here, and still more universal in Mexico and South American countries.

Doctors do not know much about treatment of the common cold; they have not yet discovered a cure for cancer, but they do know how to cure syphilis. All that is necessary is that people suffering from the disease go to their doctors for treatment.

The new requirement for a test before one may secure a marriage license is calculated to take young people to the doctor so each party to the marriage contract may know the other is free from the contagion of syphilis—a disease which causes so many babies of wrecked health, and so much distress among grown people


Plymouth News

Topics About
Your Health
BY
Marshall County
Medical Society

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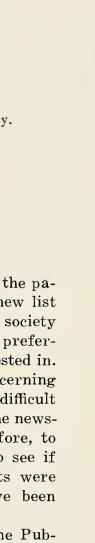
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Plymouth Daily Pilot

THE NEW
MARRIAGE LAW.

On March the first, 1940, the amendment to the Marriage Law which was enacted at the recent session of the State Legislature, will become effective. It is important that the public understand both the reason for this law and the provisions of this law.

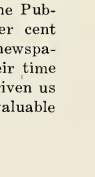
In the fight to check syphilis it has been noted that 750,000 of the [illegible] million new cases of syphilis reported each year occur in young men and young women between the ages of 16 and 30. It is also estimated that 85% of American brides and 65 percent of American grooms are under 30 years of age. This means that syphilis is being brought into the marriage relationship and is


Plymouth Daily Pilot

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Watarasa Tribune

VACATION—WITH PAY

By the Marshall County Medical Society.

This is the time of year that minds begin to wander from the hum-drum of the office and factory routine to green fields, cool streams, mountains, lakes, sunny beaches, fish leaping from the water at the end of a 100 feet of line, and numerous sports that are denied the average individual except for a few short weeks of summer vacation. For most of us these few weeks will be full ones, for we must pack into that short space of time enough recreation, travel, or sports, to last us for another year. Plan your vacation in such a way that it will yield a good return in health and increased vitality—a vacation with pay.

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At the present time the committee is planning to have a meeting for the general public at which time socialized medicine will be discussed by a lay speaker.

The following comments have been received from newspapers:

May 16, 1940.

Dear Doctor:

Under separate wrapper I am mailing a copy of the *Citizen* with the latest article. Thanks for the mat, which I think is a good idea.

I have received several favorable comments from readers on the articles the county medical society has been publishing. It is evident that they are arousing interest. After all people do read the half-baked health articles that are sent out by syndicates, so there is no reason why they would not be interested in those from a reputable source.

It seems to me that the doctors are realizing that under the circumstances it is becoming necessary for them to "sell" themselves just as the bankers have had to do, and these well-prepared articles are doing just that.

Yours sincerely,
M. R. Robinson, Editor and Publisher,
THE CULVER CITIZEN.

May 22, 1940.

Dear Doctor:

We have been receiving and publishing the weekly articles furnished during the past few weeks by the Marshall County Medical Society and I believe they are being read and appreciated by a large majority of our readers.

That the public is interested in health articles has been proven to us by the continued personal inquiries sent in by subscribers to the syndicated health column we have been running for several years. The advice given in the column is of a very general nature and the reader is always advised to consult his family physician before taking any curative to combat an ailment and to obtain an accurate diagnosis.

The articles you have been furnishing cover a wide field and touch upon subjects of immediate interest to local readers. They should be of interest generally for the authoritative information and advice given. The name of the Marshall County Medical Society under each article to me gives added value to the articles distributed and I believe all readers will feel likewise.

The matted heading for the articles is greatly appreciated by us and I feel sure much more agreeably attracts the eye of the average newspaper reader.

I hope your plan to continue the articles proves advisable, with benefits both to the reading public and to members of the medical society.

Yours truly,
Roland B. Metsker, Publisher
THE PLYMOUTH DAILY NEWS.

May 22, 1940.

Dear Doctor:

When the Marshall County Medical Association first considered the publication of articles on health, prepared under the auspices of the association, we were somewhat skeptical.

But now, after the articles have appeared for several months, we have come to the conclusion that they are a commendable feature. Of course our subscribers do not take the trouble to write in, or even come in to mention the articles. The public never "writes the editor" or complains or compliments except in the case of controversial articles. Your articles avoid the controversial, as they should.

We believe there has been too much isolationist attitude in the medical profession, on the grounds of ethics. Such articles as we have published are in the right direction towards creating a better understanding and appreciation of the profession, approaching the matter each week more from a layman point of view.

Yours very truly,
Howard F. Grossman, Asst. Ed.
THE PLYMOUTH DAILY PILOT.

ABSTRACTS

DIGITALIS FOR OBESITY

"Too much publicity has apparently been given to the reports of a method of weight reduction which involves administration of digitalis for suppressing the appetite," *The Journal of the American Medical Association* for June 8 says:

"The underlying thesis that the food intake determines the weight is, of course, correct; definite suppression of appetite will ordinarily be followed by loss of weight. Moreover the use of ipecac and similar drugs may result in a loss of appetite even before nausea and vomiting are manifested. Whether or not digitalis can produce a loss of appetite without harmful effects is more debatable. The work of Hatcher and Weiss in particular has shown that the nausea produced by digitalis is a reflex the sensory organs for which do not appear to be located in the heart. Thus the type of nausea which digitalis produces is at least partly due to factors other than gastric irritation. Indeed, nausea and vomiting are toxic symptoms of digitalis and constitute a warning to decrease or stop the administration of the drug.

"The observations reported by Bram on this method of reducing body weight (wherein he reports effective results) have attracted the attention of some writers for the public. Confirmatory evidence for his views is lacking. The method cannot be generally recommended unless its efficacy and safety have been thoroughly demonstrated by carefully controlled observations. At present the use of this technic is clearly in the experimental stage and uncontrolled use should be discouraged."

LIBRARY SERVICE IN HOSPITALS

GLADYS WILMOT GRAHAM†
HAMMOND

The fact that medical libraries are required by the American Medical Association in all hospitals approved for internships and residencies in specialties is not the only reason why the need for hospital libraries is growing. One of the problems with which physicians practicing outside medical centers are faced is the lack of easily accessible reference to the literature of medicine. How the individual hospital may meet this need is the paramount issue.



Mrs. Graham

It is impossible for the physician to purchase all the medical books and periodicals he must refer to in connection with his research for the writing of medical papers, in regard to clinical problems, or when he is to give an address. Even medical libraries find it difficult to acquire a representative showing of the increasing numbers of monographs and textbooks, not to mention the 1,200 or more medical journals which are on the market. Local medical societies have aided extensively in helping to establish libraries in their communities, yet only a relative few of these have developed files of material and book stacks sufficient to serve the profession.

The hospital as an educational unit for interns and nurses has a daily need for quick reference; but the cost of this service, if left to the hospital alone, is prohibitive. For the average 250 bed hospital, the problem is perplexing. For the smaller hospital, the problem is often reduced to an impossibility. Yet medical library service can be had in any hospital regardless of its size provided a cooperatve spirit is present. A competent librarian can do much to foster good will and stimulate an interest in the use of pooled resources.

In organizing the hospital library, the first thing to do is to engage the services of a professionally trained and experienced medical librarian. By medical librarian is not meant a record librarian. The work of the record librarian is more or less clerical while the work of a medical librarian requires training in library methods. A medical librarian who has had medical reference experience usually can include in her duties the routine work of therapeutic book-service to patients and assistance in research for nurses better than can a librarian who is not experienced in the specialty of medicine. This work is highly specialized and should not be attempted by other than one trained in the field. A woman is better suited to this type of work than is a man because of the duties involved, especially in the room book-service to patients.

Where no library has existed in a hospital, the first duties to be taken up by the librarian are the gathering into one room of all of the available material and selecting from this material the books, medical journals, pamphlets, reprints, et cetera, that are suitable to the known needs of possible readers. This material should then be classified and cataloged for ready reference. Duplication of material should be avoided insofar as is possible. The Boston Medical and the Cunningham[1] systems of classification are best suited to medical libraries because of their adaptability and expansion potentialities. The Dewey Decimal system is inadequate for any purely medical library. The larger medical libraries may use the Cutter expansion in connection with any system of classification if a work number is needed. The smaller libraries need not concern themselves with this additional finding aide, since the classification number is sufficient as a call number when the author's name and the title of the book are known.

From this point on the library will develop according to the efficiency with which the existing problems are met. The assistance of an alert library committee and a cooperative hospital superintendent can do much literally to "make a mountain out of a mole hill," so to speak.

The attending staff members, the visiting physicians, and others who use the hospital library may be better served if the librarian augments the library's supply of medical literature by making accessible all possible interlibrary loan services, for there is always the call for material not carried.

Since the process of integration is an intricate one, the ways and means of giving this service should be left to the discretion of the librarian, although suggestions are never out of order.

Among sources from which medical material may be borrowed are: American Medical Association's package library service on specific subjects, and *Hygeia* material, in folders, accompanied by an outline for a proposed speech; American College of Surgeons, package library and translation service; Army Medical Library and the Surgeon General's Office, Washington, D. C.; the public libraries in certain localities; the state libraries and depositories; the medical centers; hospital medical libraries; and biological libraries. The Directory of the American Medical Association lists medical

† Librarian, Memorial Medical Library, St. Margaret Hospital, Hammond.

[1] Reviewed in *Modern Hospital*, September, 1937, p. 120.

libraries alphabetically by states. The state library extension agencies usually can supply names of libraries in their areas which lend medical material.

Membership in the Medical Library Association (Col. Harold W. Jones, president, Medical Library Association, and librarian, Army Medical Library) is an asset to any medical library. Institutional members are privileged to exchange their duplicate medical journals and books for those needed to complete their own library files. Lists are exchanged between institutional members and the association every few months. This service is gratis to members. The *Bulletin of the Medical Library Association* contains many valuable hints on current medical library methods and sources as well as medical library news.

A library fund should be budgeted by the medical staff of the hospital; the hospital should furnish the space and the equipment for the library as well as the funds for the librarian's salary. This library fund should be used for new books, subscriptions to medical journals, binding, and incidental expenditures. About $150 to $300 annually is needed to maintain a modern clinical library of approximately 3,000 volumes and files of about 100 journals. Many books and journals are acquired without cost. The scale may be lowered or increased depending upon the size of the hospital and the demand created.

There are many ways whereby the fund may be increased without so much burden falling upon the individual members of the staff. Sales of duplicate medical journals and used books may be made to firms such as the H. W. Wilson Company in New York City. They issue a "want list," which may be had for the asking. Any of the firms advertising to sell used medical books and journals are usually in the market to purchase them. Lists of duplicate library holdings to be disposed of should be made and submitted to the various firms who deal in this type of literature. In a year's time the library fund may be increased by a hundred or more dollars from the sale of such material as this.

Physicians should be encouraged to donate to the hospital library all medical books and journals which they no longer need. These may be utilized in many ways. Some will help to complete the library files. Some may be sold. Some may be put on the exchange lists of the Medical Library Association, and others will be found worth clipping for the package library service.

It should be understood that a hospital library must not be allowed to become merely a depository for old and worn out books. However, all books and journals may be put to some use, and sufficient storage room should be provided when the hospital gives space for the housing of the library.

In a community where there is no other medical library it is well to increase the size and service as quickly as possible to include courtesy loans to physicians and nurses of the district who are not on the hospital's regular staff. A neat little profit may accrue from loans of this kind either by charging a small fee for the service or by accepting donations. It is not always wise, however, to charge other libraries for interlibrary loans, since the spirit of cooperation between libraries is thereby hampered.

Staff cooperation is absolutely essential if pooled interests are to serve collectively. When a doctor donates to the hospital library a subscription to a medical journal, he receives in return access to all other medical journals in the library. Viewing it from this angle, he is certainly not a loser.

The package library file is fast becoming an integral part of the hospital's library service. It is of vital importance that some way be provided to keep together the material in this loan service: pamphlets, reprints, consulting bureau excerpts, papers done by staff members, and articles clipped from journals. These may be filed in folders and the folders filed in legal sized files or in filing boxes. This material should be classified and cataloged. The same system of classification as is used for the books is the simplest plan. Analytic catalog cards of author, title, and subject should be made of all available material. These should be filed in dictionary sequence in a regulation catalog filing cabinet, with provision made for expansion.

The binding of medical journals should be done as recent files are completed. All periodicals may be cataloged by title only, a card to a volume, with available numbers of volumes listed. In this way the user may see at a glance which medical journals are among the library's holdings and which are missing. When missing numbers are added to the collection these may be added to the cards. When the volumes are complete and bound all that need be added to the cards is the classification and accession numbers to show that the volume of unbound journals is now on the shelves as a book.

Smaller libraries may dispense with a card catalog file by marking the shelves of books and the divisions of the package library file with subject headings of the main divisions of the system of classification used. It has been found by wide experience, however, that the dictionary catalog for keying all the library's holdings is the best possible investment, for as the library grows—as any used library will—much material that should be made instantly available would be inaccessible without this valuable index.

A certain portion of the library should be set apart solely for reference use. Here are kept the volumes of the *Quarterly Cumulative Index Medicus*, without which it is next to impossible to find articles in the medical journals; the dictionaries; the directories; the atlases; and all other reference aides. In the larger libraries a room is provided for this purpose, with a reference librarian in charge. In the smaller library, a corner suffices.

The hospital library may be organized in three divisions housed together under the supervision of one librarian: the medical division for the doctors, the nursing division for the nurses, and the patients' division which includes book-truck service to hospital rooms on an average of three times weekly. This plan has proved to meet the needs of the average hospital to best advantage, since it enables the hospital to afford the services of a trained librarian who usually can handle the work of all three divisions with assistance as needed. As the library service grows the divisions may be separated and an assistant placed in charge of each division. Those not in favor of this plan have stated that it requires too much responsibility for one librarian. On the other hand, if there is assistance provided commensurate with the growth of the library, this should be no problem for the trained librarian. She will always have someone trained sufficiently to keep things running in her absence.

At St. Margaret Hospital in Hammond, Indiana, there are three divisions of the hospital library. These are supervised by a medical librarian. Each division has its separate committee. The medical division's committee of doctors selects or approves all purchases for its own division, and otherwise assists in maintaining adequate working conditions for research to serve the physicians of the community as well as those on the staff of the hospital. The nursing division is controlled by a committee including the superintendent of nurses, the instructors, a representative of the alumnae association who in turn has appointed her helpers in the various fields of graduate nursing: public health, industrial nursing, institutional nursing, private duty nursing, nurses of the community, as well as those connected with the hospital. The patients' division committee head is the librarian of the local public library. Excellent cooperation is maintained between the two institutions for better book service not only to the patients but for cultural and recreational reading among the doctors and nurses. The public library maintains a pick-up and delivery service of books three times a week. The medical librarian at the hospital, who is also a hospital bibliotherapist, has charge of the book selection and the hospital distribution of reading matter. The superintendent of the hospital and the librarian serve on all three committees, and an annual joint committee meeting is held for the purpose of stimulating cooperation and to discuss new ideas for the improvement and growth of the library's service. At this meeting the annual general report is presented by the librarian. Divisional reports are made to divisional committees and approved by them several times a year. Library circulation records for 1939 at the St. Margaret Hospital's library show 10,042, not counting the medical reference work done in the library. This library is only two and one-half years old and was organized by the present librarian.

One of the recent aides to medical research in a general way is the work being done by the Work Projects Administration in the matter of making central card catalogs of medical libraries in various communities. The first of these was launched in Philadelphia. Now there are about thirty states whose medical libraries are covered by these centrally located key catalogs, which are called "union" catalogs. These indexes are to be found in most of the large medical centers of the United States. At present Indiana is not covered; but, according to a recent statement made by Philip Wayne McDermott, state supervisor of the library service project, the possibilities are that this work may be done soon. Medical libraries in Indiana desiring to be represented in this collection may write to John K. Jennings, state administrator, Federal Works Agency, Work Projects Admnistration, 1200-02 Kentucky Avenue, Indianapolis.

The service of the medical librarian in the hospital is ever broadenng in scope. No longer is it confined to the institution alone. Contact with the state and national authorities on libraries and with the American Medical Association must be maintained in the matter of annual reports on advancements and policies. Accurate records must be kept not only of the library's daily routine work but of its purpose. Publicity must be done that interest in the library may not lag. A constant growth of service is the watchword. Bibliotherapy, research, extension of service—these are the keynotes to be struck after the organization of the hospital library is well under way. Always there are new innovations which may be added to improve this service. The work is never done. But to have a library in the hospital—to begin the work—is the most important step. This must be done right or valuable time is lost. Begin right, then grow. The results will be appreciated many more times over than can be imagined, for library service is quite as necessary in the hospital as any other kind of service.

Editor's Note: Questions on library organization and service in hospitals will be answered through this journal by the author of this article. Address communications to E. M. Shanklin, M.D., Editor, THE JOURNAL of the Indiana State Medical Association, 1021 Hume Mansur Building, Indianapolis.

CORRESPONDENCE

June 3, 1940.

To the Editor:

I read, on Saturday evening, for the first time the nice editorial in the last issue of the State JOURNAL written by someone of me. I wish to extend to you, or through you to the author, my appreciation for the kind words and good wishes; and to ask you to make the following correction.

The editorial stated that I was responsible for the passage of the State Anatomical Law. The State Anatomical Law was passed in the January, February, March session of the Legislature of 1903. I came to Indiana for the first time in June of 1903, so the passage of this law antedated my contact with the State by approximately three months. To someone else goes the credit for that important bit of medical history. Just who is responsible for the preparation and introduction of the bill, I do not know. My guess would be that Dr. W. N. Wishard, Sr., and possibly Dr. John Oliver were responsible. At any rate, I am certain that Dr. Wishard, Sr., could give you the facts of this matter.

I would be glad to have you publish this correction over my name, since I do not wish to seem to be accepting credit for matters concerning which I was in no way responsible.

Cordially yours,

B. D. MYERS, M.D.

To the Editor:

In the May Journal was a review of the seven-point program of the Committee on Conservation of Vision of the State Society. I congratulate the committee upon the program.

Under point 4 I note an erroneous statement. I think the statement should be that one pupil in need of a sight saving class will be found for every 500 pupils. A school system must have ten pupils in need of special instruction to receive state aid for a special class, and a school population of 5,000 in one district or more than one district may be combined for the organization of special classes. If we were required to supply a teacher for every 500 pupils, I fear the undertaking would be considered impossible by taxpayers and school boards.

The Safety First teachers over the state are doing some vision testing with but little or no training for the work.

I hope the ophthalmologists will profit by the fine article by Dr. Allen on "Trachoma" and that the family doctor will learn from Dr. Cassady's paper on "Cross Eyes" how to advise fond mothers.

I have asked for reprints for our school nurses. All the county welfare workers should be supplied with copies of these articles and other educational matter of a similar nature.

INTERESTED PHYSICIAN.

UNDER THE CAPITOL DOME

Community sanitation work of an incalculable value has been accomplished during the last six and one-half years through the Community Sanitation Program, conducted under auspices of the United States Public Health Service and the Indiana State Board of Health, in collaboration with the Works Progress Administration.

The program has resulted in installation of a total of 118,000 sanitary toilet units since its inauguration December 6, 1933.

It goes hand in hand with the health board's stream pollution program. Serving two purposes, the program provides both immediate local sanitation for farm and small town families and at the same time eliminates the source of an amount of stream pollution by eradication of the old type, unsanitary toilet units.

Importance of the program was emphasized by Dr. Verne K. Harvey, secretary of the Board of Health, who pointed out that it is being carried out in rural areas and small towns, both of which have no access to public sewers. Approximately half of the state's population lives in these areas unserved by public sewers, and runs constant danger of infection so long as the unsanitary toilet units exist, Dr. Harvey pointed out.

Approximately half a million individuals are being served by the units thus far installed, and this represents a fair sized group of the rural and small town population.

Installation of the sanitary units represents a total cost of approximately $2,500,000 to the purchasers, and a per capita cost of about $13 per person served. Each unit costs a total of $55.26, including material, labor, and all other costs, but the cost to the property owner is $22.67.

The program is under the direction of the State Health Officer, with an assistant, and seven district supervisors, provided to supervise the program in the ninety-two counties.

"Indiana ranks high among the states in the number of insanitary conditions eliminated by the installation of approved type sanitary toilets," a report of the program said. "It has received national recognition on several occasions for its efficient set-up and method of procedure, and officials from other states have been sent to Indiana to study the organization and functions of the Indiana program."

An educational program goes along with the actual construction phase of the whole program. Two motion picture outfits and various films are available through the State Sanitation Office. One district supervisor devotes his entire time to educational work. Individuals are contacted through meetings, exhibits are displayed at group meetings, county fairs, and homecomings, as well as at the State Fair. Advertising material and mimeo-

graphed articles dealing with sanitation and related health subjects are widely distributed by mail or personal contact, and newspaper space has been used.

Examinations of applicants for state medical licenses were held June 18, 19, and 20 in the Assembly room of the Claypool Hotel by the State Board of Medical Registration and Examination. They were conducted by the full board. Approximately 140 graduates of the Indiana University school of medicine, and of medical schools at other universities including Yale, Oregon, Northwestern, Illinois, and Louisville, took the examination. Work of grading the examinations was begun at once by board members, but results will not be available before Fall.

The Indiana State Clemency Commission has refused a parole to Walter Dent, who is serving a two-year sentence imposed in Madison county April 19, 1939, for theft of a physician's instrument bag. Dent claimed that he found the bag in an alley, but the commission said the fact was he tried to get another man help him dispose of the bag after he had stolen it from the doctor's car. The second man informed police of the theft. Dent, who entered a plea of guilty when brought into court, has served four sentences previously on various charges and has a reputation as a police character.

Deaths

Henry V. Logan, M.D., retired physician of Rushville, died at his winter home in Florida, May twenty-second. Dr. Logan was sixty-seven years old. He had been ill for several years. He graduated from the Medical College of Indiana, Indianapolis, in 1897, and started practice in New Salem where he remained for thirteen years, then moved to Rushville where he practiced until his retirement a few years ago. He served with the Medical Corps of the U. S. Army in World War I and was stationed at Fort Riley, Kansas.

Raymond N. Filiatreau, of Elwood, died May sixteenth, following a long illness. Dr. Filiatreau was sixty-seven years old. He had practiced in Elwood for sixteen years and had been a member of the Madison County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from Washington University School of Medicine, St. Louis, in 1899 and from the University of Louisville School of Medicine in 1900.

News Notes

Miss Marcella Gillum, of Winchester, and Dr. Charles J. Aucreman, Jr., of Montpelier, were married June sixth.

Dr. B. A. Speheger has announced the opening of an office in Bedford where he will conduct a general practice.

Indiana University Medical Center has secured several acres of land east and west of the center's buildings for future expansion.

Indianapolis City Hospital officials have opened a six-bed ward for investigating the five-day treatment for syphilis.

Dr. Abraham Owen received his medical degree from I.U. School of Medicine in June and has begun his practice in Attica in association with his wife, Dr. Margaret T. Owen, who has been in practice there for more than a year.

According to newspaper announcement, the Medical Protective Company, founded in Fort Wayne and moved to Wheaton, Illinois, in 1926, will return some of its departments to Fort Wayne.

Dr. Henry W. Greist has announced the opening of an office for general practice in Monticello. Dr. Greist practiced in Monticello before going to Point Barrow, Alaska, where he served as superintendent of the Presbyterian Hospital. He retired in 1937 and has been lecturing since then.

Dr. and Mrs. David L. Hickey, of Covington, Kentucky, have announced the marriage of their daughter, Mary Ann, to Dr. John L. Cassidy, of Evansville. The wedding occurred May eleventh, in Covington.

Miss Mary McKittrick, daughter of Dr. and Mrs. H. C. McKittrick, of Plainville, and Dr. Max R. Long, Indianapolis, were married May thirty-first. Dr. Long graduated from I.U. Medical School in June and will serve his internship in the Indianapolis City Hospital.

Dr. Charles E. Gillespie, of Seymour, read a paper on "Glands Regulating Personality" before the Biology Club at the University of Louisville, May ninth.

MAKE YOUR RESERVATIONS AT FRENCH LICK *NOW!*



This group met at French Lick in May to complete plans for the annual meeting of the Indiana State Medical Association to be held at the French Lick Springs Hotel, October 29, 30, and 31, 1940. They are (left to right): Drs. William H. Garner, New Albany; John K. Spears, Paoli; W. E. Schoolfield (standing), Orleans; George Dillinger, French Lick; Keith Hammond (standing), Paoli; H. L. Miller, West Baden; C. E. Boyd, West Baden, and Thomas A. Hendricks, Indianapolis. Third District physicians are cooperating with the Orange County Society in making arrangements for the sessions.

Dr. J. W. Bowers of Fort Wayne, secretary of the Indiana State Board of Medical Registration and Examination, has been elected to membership in the National Board of Medical Examiners to complete the term of the late Dr. Rypins. The membership term will expire in 1944.

Dr. C. H. McCaskey, of Indianapolis, has been made a member of the Board of Examiners of the American Otolaryngological Society. Dr. McCaskey is the only Indiana member of that organization of which the total membership is 100 in the United States and Canada.

Dr. William D. Davidson, of Evansville, was guest speaker at a recent meeting of the New England Regional Fracture Committee of the American College of Surgeons in Boston. Dr. Davidson talked about the uses of a new splint material, Thermex.

The Leslie Dana Gold Medal, awarded annually for outstanding achievement in the prevention of blindness and conservation of vision has been presented this year to Mr. John M. Glenn, of New York City, honorary vice-president of the National Society for the Prevention of Blindness. The medal was presented at a luncheon meeting of the Association for Research in Ophthalmology in New York City, June eleventh.

Dr. Charles Hupe, of Lafayette, suffered severe injuries to his back when he fell from a step-ladder in his yard while placing a bird-house in a tree. Dr. Hupe is eighty-three years old and is one of the oldest active doctors in his section of Indiana. His numerous friends are hoping for his speedy recovery.

According to newspaper reports, the Woman's Field Army for Control of Cancer obtained subscriptions totalling $7,854 during the Indiana campaign. Wax models showing cancer in various parts of the body were purchased as an educational exhibit and will be shown throughout the summer months at county fairs with local groups of the field army sponsoring the showing.

New president of the Indiana Society for Mental Hygiene is C. M. Louttit, director of Indiana University psychology clinics. He succeeds Donald DuShane, of Columbus. Judge Wilfred Bradshaw, of Indianapolis, is vice-president, Rev. Alexander Sharp was re-elected treasurer, and Dr. George C. Stevens and Thomas C. Hutton, Indianapolis, were renamed secretary and executive secretary, respectively.

Dr. B. H. B. Grayston, of Huntington, celebrated his ninetieth birthday at his home there, May twelfth. Dr. Grayston was born in Brighton, England, May 12, 1850. His parents, Dr. and Mrs. F. S. C. Grayston, came to the United States in October of that year and settled in Huntington. Dr. Grayston celebrated his ninetieth birthday in the home where his parents lived and where he has lived all except the first few months of his life. Dr. Grayston has been an honorary member of the Indiana State Medical Association since 1933.

Mr. Anthony Russo, of Indianapolis, proprietor of the Hoosier Book Shop and dealer in rare books, medical and others, died at his home, June sixth, aged forty-one years. Mr. Russo was known to many Indiana physicians and was a member of the American Association of the History of Medicine. In 1939 he began the preparation of a bibliography of Indiana authors sponsored by the Indiana Historical Society and during most of the last year had concentrated on a bibliography of James Whitcomb Riley.

Upon recommendation of the Committee of Revision of the U.S.P. XII, and with the approval of the Board of Trustees, the enforcement of the standards for Surgical Gut, which were announced in the Second Supplement to the U.S.P. XI, are postponed until January 1, 1941. These standards were to become official on July 1, 1940, but because of the discovery that considerable stocks of surgical gut, conforming to the new Pharmacopoeial standards with respect to their diameter, tensile strength, and sterility, but not labelled in accordance with the new official requirements, were still in the hands of dealers, the action reported above was taken by the official Pharmacopoeial Committee and Board. Since this surgical gut could be used with entire safety, it was deemed unwise and unnecessary to render the stocks unsalable and therefore cause large financial loss.

INFORMATION WANTED REGARDING DRIP METHOD OF TREATING SYPHILIS

In order that there may be a central source of information with regard to studies of the intravenous drip method of treatment of syphilis ("the five day treatment"), the American Social Hygiene Association at 50 West 50th Street, New York, has been asked to gather and to keep available information regarding this subject. The Association requests all physicians and hospitals which are planning or are now carrying on studies of experiments with this method of treatment of syphilis to send brief information regarding the following points to the Associaton at the above address:

1. Name of hospital or other institution.
2. Name of principal physician in charge of the intravenous drip study.
3. Type of case or cases of syphilis treated by the intravenous drip method.
4. Name of drug or drugs used. (a) By the intravenous drip method; (b) By any other method before, during or after intravenous drip therapy. (Mention any specific therapy used.)
5. Routine laboratory work done on cases of syphilis treated by the intravenous drip method.
6. Usual number of hours of intravenous drip treatment per day per patient.
7. Usual number of days of intravenous drip treatment per patient.
8. Any other pertinent facts.

The Association will be glad, so far as possible, to answer inquiries regarding the intravenous drip treatment of syphilis. The Association has available to physicians, upon request, a brief pamphlet on the subject of the present status of the intravenous drip method of treatment of syphilis, written by Dr. Charles Walter Clarke, Executive Director of the Association and a member of the New York City Committee on the Intravenous Drip Treatment of Syphilis.

INDIANA UNIVERSITY NEWS

At the recent commencement exercises 105 young men were granted the doctor of medicine degree, one the doctor of medicine degree *cum laude*, 27 the graduate nurse degree, and 44 the doctor of dental surgery degree.

The doctor of medicine degree *cum laude* was awarded to Louis Spolyar, and the doctor of medicine degree to the following: Harry Aldrich, Angola; Eugene Austin, Anderson; Robert Badertscher, Bloomington; Edwin Bailey, Linton; Joseph Ball, Indianapolis; William Ballou, Fort Wayne; Nathan Bander, Brooklyn, N. Y.; Ernest Beaver, Jr., Rensselaer; Jene Bennett, Plymouth; Wilmot Boone, Indianapolis; George Brown, Greenwood; Raymond Burnikel, Evansville; Basil Byrne, Georgetown; Perry Campbell, Liberty; Herbert Chattin, Vincennes; Paul Clouse, Evansville; William Cohen, South Bend; Alvin Cohn, Seymour; Leo Connoy, Indianapolis; Wendell Covalt, Muncie; Sam Davis, Brazil; William Davis, Jr., Asheville, N. C.; Paul Dintaman, Richmond; Richard Dukes, Dugger; Basil Dulin, Bedford; Wallace Dyer, Evansville.

Edwin Eaton, Indianapolis; Paul Eidson, Indianapolis; John Engle, Winchester; Paul Evans, Indianapolis; James Fant, Indianapolis; Warren Fischer, Gary; Meredith Flanigan, Milltown; John Flick, Indianapolis; Ephraim Fosbrink, Vallonia; Joseph Freeman, Syracuse; Martin Garfinkle, Indianapolis; Edgar Garland, Indianapolis; Jerome Graf, Bloomfield; Salvatore Grillo, Gary; David Hadley, Indianapolis; Bernard Hall, Walton; Em-

ory Hamilton, Kendallville; Daniel Hare, Evansville; Archibald Hickman, Jr., Hammond; Eldore Hoetzer, Fort Wayne; Sterling Hoffmann, Fort-Wayne; Anne Holovachka, Gary; James Hundley, Summitville; Dean Jackson, Angola; Arthur Nottingham Jay, Indianapolis; George Jewell, Kokomo; Linden Johnson, West Point; Robert Kabel, Winchester; Julien Kennedy, Indianapolis; Carroll Kern, Lakewood, Ohio; Knight Kissinger, Hamilton; John Kitchel, Indianapolis; Kurt Klee, Indianapolis; Jacob Kline, Ligonier, Pa.; Francis Kubik, Michigan City; Elbert Laws, Milan; Max Long, Marion; Clarence Lucas, Jr., Indianapolis; Harry McClelland, Jr., Indianapolis; James McIntyre, Indianapolis; Virgil McMahan, Bedford; Charles McVaugh, Pendleton; Carl D. Martz, Anderson; Robert Maschmeyer, Indianapolis; Robert Miller, Nappanee; Roland Miller, Plymouth; Dwain Mings, Kokomo; Leonard Morgrett, Pennville; Charles Morris, Rockville; Joseph Mullin, Rockfield.

Wyndham Nutter, Morristown; Andrew Offutt, Spiceland; Abraham Owen, Attica; James Peirce, Jr., Indianapolis; Walter Pelczar, Hobart; Robert Phares, Greentown; Robert Rang, Washington; Harrel Reed, Vincennes; Joseph Reed, Rochester; Charles Sage, Brownstown; Robert Saide, Michigan City; James Schornick, Wabash; Harry Sherster, Indianapolis; Jack Shrader, Indianapolis; Frederick Simmons, Goshen; John Spahr, Jr., Huntington; Everett Steele, Sullivan; John Stepleton, Vevay; Elsworth Stucky, Indianapolis; Glenn Swihart, Elkhart; Willard Taylor, Indianapolis; Paul Thompson, Indianapolis; Fred Toumey, Ridgeville; Walter Twineham, Indianapolis; William Vanness, Summitville; William Webb, Indianapolis; Donald Winter, Logansport; Clarence Worth, Indianapolis; Dale York, Bloomington.

On the following students was conferred the doctor of dental surgery degree: Edward Albright, Connersville; James Baker, Odon; Eugene Bales, Indianapolis; Martin Barco, Lawrence; Ralph Berman, South Bend; Emory Bryan, Fort Wayne; John Davidson, Bloomington; Frank Etter, Seymour; Richard Ferling, Richmond; Charles Fly, Jr., Lima, Ohio; Albert Fodora, Indianapolis; John Fraser, Hobart; John Green, Syracuse; Myron Greene, Indianapolis; Rolenzo Hanes, Gainesville, Fla.; Ralph Hanley, Indianapolis; William Hanning, Indianapolis; Eugene Hess, Richmond, Va.; Richard Howard, Boston; Eugene Iden, Cleveland, Ohio; Joan Kasmar, Chicago, Ill.; Harold Koenig, Edwardsport; William Koss, Indianapolis; Robert Lively, Cicero; Oliver McClintock, Lapel; Gus Metaxas, Gary; Gerald Morris, Cambridge City; Seymour Nadler, Dorchester, Mass.; Albert Nelson, Shipshewana; Richard Niles, Fort Wayne; Samuel Patterson, Indianapolis; Doyle Pierce, Chicago, Ill.; George Richardson, Jr., Marion; William Robinson, Brazil; Lynn Rodenbarger, Rossville; Leonard Rosenthal, New York City; Julius Sexson, Worthington; Irvin Sharon, Cincinnati, Ohio; Marion Shaw, Zionsville; Karl Stoelting, Syracuse; Reginald Stookey, Portland; Jonathan Thomas, Connersville; Gayle Troutwine, Michigan City; Clyde Wilson, Cleveland, Ohio.

The graduate nurse degree was conferred on: Roberta Alexander, Frankfort; Alice Archbold, Decatur; Cassie Bammer, Princeton; Zerelda Christie, Yeoman; Audrey Daniel, Thorntown; Mary Dumenric, Gary; Helen Marie Faris, Bloomington; Opal Foxworthy, Brazil; Florence Fulk, Worthington; Juanita Gaudin, Vevay; Anne-Louise Gladman, Brownsburg; Valeda Jefferis, New Castle; Ruth Langdon, Wheatfield; Rettalou McCullough, Oakland City; Marguerite McDonel, Elwood; Helen Mitchell, Bedford; Frieda Peters, Huntington; Kathleen Remley, Crawfordsville; Jeanne Riddle, Indianapolis; Mary Elizabeth Ruddell, Sullivan; Mildred Scifres, Seymour; Doris Smith, Indianapolis; Ruth Steinkamp, Huntingburg; Mary Louise Stoelting, Syracuse; Thelma Turpen, Sullivan; Margaret Jean Williams, Hope; Bonnie Wright, Tunnelton.

BOOKS

Books Received

NEOPLASTIC DISEASES. By James Ewing, A.M., M.D., Sc.D., LL.D., professor of oncology, Cornell University Medical College, New York City; consulting pathologist, Memorial Hospital. Fourth edition, revised and enlarged. 1160 pages with 581 illustrations. Cloth. Price $14.00. W. B. Saunders Company, Philadelphia and London, 1940.

AN ANATOMICAL ANALYSIS OF SPORTS. By Gertrude Hawley, M.D., formerly in charge of Physical Education for Women at Northwestern and Stanford Universities. 191 pages with 97 illustrations. Cloth. Price $3.00. A. S. Barnes and Company, publishers, New York, 1940.

PSYCHIATRY FOR NURSES. By Louis J. Karnosh, B.S., Sc.D., M.D., associate clinical professor of nervous diseases, School of Medicine, Western Reserve University, and Edith B. Gage, R.N., supervisor of the neuropsychiatric division, City Hospital, Cleveland, Ohio. 327 pages with 34 illustrations. Cloth. Price $2.75. C. V. Mosby Company, St. Louis, 1940.

SPECIALTIES IN MEDICAL PRACTICE. By Edgar Van Nuys Allen, M.D., Editor, chief of a Section in the Division of Medicine, The Mayo Clinic, and associate professor of medicine, The Mayo Foundation for Medical Education and Research, Graduate School, University of Minnesota. Foreword by Donald C. Balfour, M.D., consultant in Surgery, The Mayo Clinic. Two volumes. Loose-leaf. Thirteen specialists have contributed chapters. The volumes consist of about 1,000 pages and 300 illustrations. Imitation leather binding. Price $25.00. Thomas Nelson & Sons, New York and Edinburgh, 1940.

DIABETES. Practical Suggestions for Doctor and Patient. By Edward L. Bortz, A.B., M.D., associate professor of medicine, University of Pennsylvania; foreword by George Morris Piersol, B.S., M.D. Second edition, revised and enlarged. 296 pages with 15 illustrations. Flexible fabrikoid binding. Price $2.50. F. A. Davis & Co., Philadelphia, 1940.

DIRECTORY OF MEDICAL SPECIALISTS. Certified by American Boards, 1939. Paul Titus, Directing Editor; J. Stewart Rodman, Associate Editor. Pages: xv & 1573. Price: $5.00. Columbia University Press, Morningside Heights, New York City, 1940.

This is the only official directory of its kind. Approximately 14,400 diplomates certified by the twelve special

American Boards and one of the two affiliate boards are listed.

A separate section is devoted to each American Board. There are both geographic and biographic listings. In addition, there is a complete alphabetical list of all the 14,400 diplomates, with addresses and indications of specialty certification; in the geographic section complete biographic information is given. The organization and examination requirements of each of the American Boards are explained in full.

All these features make the Directory valuable to doctors, hospitals, social agencies, libraries, medical societies, business organizations, etc. It will help hospital officials pass on the ability of candidates for staff positions. It will provide medical society officers with authoritative lists. Family physicians can form an accurate judgment of the qualifications and ability of specialists in any branch of medicine for the benefit of patients.

Actual contents include: Biographical List of Diplomates by State and City; Advisory Board for Medical Specialties; The American Board of Anesthesiology; The American Board of Dermatology and Syphilology; The American Board of Internal Medicine; The American Board of Obstetrics and Gynecology; The American Board of Ophthalmology; The American Board of Orthopaedic Surgery; The American Board of Otolaryngology; The American Board of Pediatrics; The American Board of Plastic Surgery; The American Board of Psychiatry and Neurology; The American Board of Radiology; The American Board of Surgery; The American Board of Urology; Alphabetical List of Diplomates.

SOCIETIES AND INSTITUTIONS

INDIANA STATE MEDICAL ASSOCIATION

Executive Committee

May 26, 1940

Roll call showed the following present: C. A. Nafe, M.D., chairman; K. R. Ruddell, M.D.; A. M. Mitchell, M.D.; A. F. Weyerbacher, M.D.; Albert Stump, attorney, and T. A. Hendricks, executive secretary.

Guests: A. W. Cavins, M.D.; C. L. Luckett, M.D.; J. F. Spigler, M.D.; E. O. Asher, M.D.; and H. B. Mettel, M.D.

The statement of Receipts and Expenditures for April for the association committees was approved.

Membership Report:

Number of members May 25, 1940	3070
	(90 hon. mems.)
Number of members May 25, 1939	3047
Gain over last year	23
Number of members Dec. 31, 1939	3145

Treasurer's Office

Bank account protection policy brought to the attention of the committee.

1940 Annual Session at French Lick, Tuesday, Wednesday and Thursday, October 29, 30 and 31, 1940

No word has been received yet from Dr. Harvey as to whether or not the health officers will meet on Monday, October 28.

Commercial exhibit. 27 spaces sold; 7 to be sold.

Scientific program. All places are filled on the general program and preliminary programs for medical and anesthesia sections have been received.

Banquet speaker. Dr. Ruddell stated that he would invite Walter McCarty, managing editor of The Indianapolis News, to be one of the principal speakers at the banquet.

Executive secretary is to attend meeting of the Orange County Medical Society on May 28.

Letter received from John Pratt, National Physicians' Committee, in regard to a speaker on the state program. Dr. Irvin Abell has already been invited to speak on the National Physicians' Committee before the House of Delegates.

Suggestion of Dr. John Palm in regard to tournament for district golf champions. The committee suggested that Dr. Nafe talk to Dr. Palm about this idea. The committee felt, however, that officially this matter was not in its jurisdiction as the golf tournament is wholly in the hands of the local convention committee.

Legislative, Legal and Social Security Matters

National:

The Wagner-George hospital construction bill, S. 3230. The committee approved sending letters to Senators Fred VanNuys and Sherman Minton in accordance with the information obtained from the American Medical Association.

Word received that in Rhode Island legislation has been passed granting the osteopaths "a license to practice any branch of surgery."

Local:

May primaries. Information to be obtained upon all candidates for the legislature.

Report of the progress made by the Indiana Inter-Professional Health Council in regard to barbiturate legislation brought to the attention of the committee. The committee expressed its approval of the work that the Inter-Professional Health Council is doing.

Organization Matters

Letter from L. G. Montgomery, M.D., president of the Eighth District Medical Society, in regard to a county medical society refusing to pay district dues brought to the attention of the committee. The Executive Committee felt that the Indiana State Medical Association could take no action in regard to any county society refusing to pay district dues as the Constitution and By-Laws do not recognize officially any district society. Mr. Stump was to write to Dr. Montgomery giving him this information.

Letter received in regard to the right of a physician to membership in the "state, national and special medical societies" without belonging to his county medical society. The physician was written that the only means of belonging to a state society is through membership in a local county medical society.

Formal letter from the Lake County Medical Society stating that N. K. Forster, M.D., had received the endorsement of the Lake County Medical Society as a candidate for president-elect of the Indiana State Medical Association brought

to the attention of the committee. The committee also reported that similar letters had been received from Madison county in regard to M. A. Austin.

Group Hospitalization and Group Medical Practice

Letters from N. K. Forster, M.D., Hammond, chairman of the Permanent Study Committee on Health Insurance and National Medical Situation, in regard to the adoption of the Michigan Plan in Lake county or throughout the state discussed by the committee. The committee authorized Dr. Nafe, the chairman, to prepare a letter to Dr. Forster stating the position of the committee, which is as follows, concerning this matter:

1. If the Lake County Medical Society wants to try out the Michigan plan locally, as far as the state association is concerned, this is all right, but the committee still feels that under the present law there is no way that the Michigan plan or any other medical service or bona fide hospitalization plan can be legally instituted here in Indiana until an enabling act is passed by the legislature.

2. The Governor's Committee and the House of Delegates have gone on record favoring group hospitalization plans, and the House of Delegates adopted a recommendation of its reference committee at the Fort Wayne session providing for medical service plans. The Governor's Committee has agreed to draw up such legislation to meet the objection upon which the Governor based his veto of the bill which was passed at the 1939 session of the legislature. The Governor's Committee will present this new bill at the next legislature.

3. The Executive Committee feels that as far as the medical service plans are concerned the recommendation of the House of Delegates should be confirmed at the French Lick session, and if such plans are to be motivated, the House should definitely and specifically instruct the legislative committee to prepare a bill to be presented at the 1941 session of the legislature.

4. If such a bill is to be passed it must have the backing of practically the entire medical profession.

5. The Michigan plan undoubtedly has its good points, but the committee feels that the Indiana State Medical Association should work out a plan of its own when the time comes rather than adopting in toto the Michigan plan.

Letter received from Dr. Shanklin expressing his personal feeling that the state association should sponsor insurance and hospitalization measures and "not let every Tom, Dick and Harry come forth with ideas as to health and hospitalization insurance."

Hospitalization Benefit Association. Informal report made upon this organization to the committee. Letter received from Rollen Waterson stating that this organization had not received the official endorsement of the Lake County Medical Society despite the fact that intimations had been made that this association had been so endorsed.

Copy of the Medical Service Plan of New Jersey brought to the attention of the committee. Copies of this plan are to be obtained and sent to the members of the Executive Committee, the co-chairmen of the legislative committee, and the Permanent Study Committee on Health Insurance and National Medical Situation.

Future Medical Meetings

District meetings: Second District, June 6, 1940, Sullivan; Eighth District, June 19, 1940, Elwood.

A. M. A. meeting, June 10 to 14, New York

Invitation received from California Medical Association to hold 1943 A. M. A. meeting in San Francisco.

The committee approved the program adopted by the Indiana State Conference of Social Work to be held in Indianapolis, November 13 and 14.

Medical Economics

Attention of the committee called to the resolution received from the Medical Association of Alabama condemning the practice of foundations and universities patenting drugs or medical appliances for profit. The committee suggested that copies of this resolution be forwarded to the delegates from Indiana to the A. M. A. without recommendation.

Letter received from a physician asking what could be done in regard to an unethical practitioner being allowed to practice in a county hospital was referred to Albert Stump for answer.

Medical Relief

Report made by Dr. Leffel upon the meeting of the East-Central Regional Conference of social workers which he attended on May 8. Dr. Leffel expressed his opinion that this matter could be worked out best through each local medical society and urged "each county medical society to take the responsibility of caring for all the people including the indigent." Dr. Leffel wrote further, "Since there is such a great variation of circumstances in the various counties in the state, we feel that no single plan would be satisfactory in all cases. Therefore we are charging each county society with the responsibility of cooperating with local lay groups to the end that the indigent are cared for."

Committee informed of article which will appear in the June issue of THE JOURNAL prepared by Leo X. Smith, attorney for the Township Trustees' Association, in regard to medical care of the indigent.

Committee received the information that 700 answers from the 1016 trustees had been received to the questionnaire that was sent out recently in regard to medical service. When the information contained in these questionnaires is compiled and summarized a joint meeting of Dr. Leffel's com-

mittee and a committee from the township trustees' association is to be held.

Monthly WPA report received by committee.

Sickness Insurance and Socialized Medicine

The committee highly recommends the article which appeared in the May issue of "Nation's Business" entitled "The Case for Private Medicine." Comment upon this article will be carried in the June issue of THE JOURNAL of the Indiana State Medical Association.

Dr. J. A. Hannah of the Toronto Associated Medical Services was one of the speakers at the Ohio State Medical Association meeting. The committee suggested that information be obtained as to how his talk was received.

State Board of Medical Registration

The committee was informed of the fact that an organization entitled the Indiana State Association of Nurse Anesthetists exists although according to the rules of the State Board of Medical Registration and Examination nurse anesthetists are illegal in Indiana. This matter was referred to the State Board of Medical Registration and Examination.

The committee was informed that the LaPorte County Medical Society approved the $2.00 registration fee while the Clinton County Medical Society disapproved the registration fee.

Proposed Health Convention

Some time ago, proposal was made that the medical, dental, pharmaceutical and nursing associations hold a joint meeting in Indianapolis. This is to be done under the auspices of the Indiana Inter-Professional Health Council. A letter from Henry T. Davis, secretary-manager of the Indianapolis Convention and Publicity Bureau, was brought to the attention of the committee in which Mr. Davis asked whether the state medical association would be interested in such a meeting. The committee referred this letter to F. S. Crockett, chairman of the state association Committee on Indiana Inter-Professional Health Council.

Postgraduate

In the absence of Dr. Herman Baker, the chairman, Dr. Howard Mettel will attend the meeting of the Associated State Postgraduate Committees to be held in New York on June 10 as representative of the Indiana State Medical Association.

Resolution of Vigo County Medical Society against Standards Set for Maternity Homes and Hospitals

Representatives of the Vigo County Committee for the Study of Obstetric Regulations met with Dr. E. O. Asher, chairman of the State Board of Health Liaison Committee to Deal with Social Security Act, and Dr. Howard Mettel and discussed the action taken by the Vigo County Medical Society disapproving standards set for maternity homes and hospitals. Following this meeting the group met jointly with the Executive Committee and discussed this problem. It is the understanding that certain amendments are to be made to these rules and regulations along with the recommendation that any investigation of the hospitals which is to be made in the future shall be made by physicians rather than by social workers.

Action of Oregon State Medical Society against Mayo Clinic

Letter received from the Oregon State Medical Society retracting its statements against the Mayo Clinic.

Correspondence with K. E. Miller, M.D., Director, Medical Advisory Division, Federal Trade Commission.

This correspondence is to be turned over to the Indianapolis Medical Society.

Military Affairs

Telegram received from C. K. Gregg, secretary of the organization which has been formed under the direction of Colonel Knox of Chicago, and Edward C. Elliott and Richard Fairbanks, co-chairmen for Indiana, for the training of volunteer aviators, brought to the attention of the committee. The telegram asks that the members of the Indiana State Medical Association volunteer their services to make medical examinations of those who volunteer for aviation service. This was discussed by the Executive Committee and Dr. Mitchell, who is a former president of the Aero Medical Association, explained in detail the highly specialized training which it takes to make these examinations of aviators. As a result the committee made the following three points in regard to this request:

(1) Examining for aviation is a highly specialized field which takes special training on the part of the physicians.

(2) Only men who are qualified to do this work should make these examinations which take more than an hour for each examination.

(3) It would be an imposition to expect physicians to do this work for nothing. At the present time there is a set fee received by physicians for making these examinations.

It was suggested that Colonel Knox's committee should get in touch with D. S. Brachman, 5440 Cass Avenue, Detroit, the secretary of the Aero Medical Association, concerning these examinations. It also was suggested that, as this is a military affair, this matter should be taken up with the M-Day Committee in Indiana.

The Executive Committee is very much in sympathy with the movement for strengthening the defenses of the country and will cooperate to the best of its ability. It is felt that the physician in private practice is not qualified to make these highly specialized examinations which take special equipment and special training. There are some 700 physicians throughout the country who are members of the Aero Medical Association of the United States who probably are qualified to make aviation examinations. It is obvious that an enormous amount of work will be required of the men who make such examinations, and that the training of these men who do this work is so comprehensive and extensive that it would not be right to ask men

to donate their time in such instances free of charge.

The Executive Committee felt that this is a matter to be referred to the M-Day Committee and the Committee on Veterans' Affairs.

(Following the meeting of the Executive Committee the secretary talked with Mr. Gregg who informed him that his group did not have in mind a complete aviation specialized examination but merely a preliminary general physical examination. Mr. Gregg said that his committee felt that a number of candidates would be eliminated by requiring these preliminary examinations. He said that the organization for this volunteer aviation service probably would be carried on through the American Legion posts. The suggestion was made that each boy be required to have a physical examination from his own family physician and that the arrangements as to fee, etc., be a matter between the boy and his physician.)

The Journal

The committee approved the program suggested by the A.M.A. in regard to advertising through the Standard Rate and Data Service, Inc. This will cost $8.44 a month.

The committee approved the purchase in advance of paper stock for the remainder of 1940.

Malpractice

Albert Stump discussed the differences in malpractice insurance policies written by the various insurance companies. A chart is to be prepared and presented to the committee at its next meeting showing the different types of coverages, the exemptions and features covered in the various policies of the commercial companies.

The following notice in regard to a recent malpractice case in Cincinnati, carried in the *Bulletin* of the Cincinnati Academy of Medicine, was brought to the attention of the committee:

> "In a recent malpractice case in Cincinnati the Court of Appeals reversed a decision of the lower court, the effect of which is to make *physicians* in Ohio responsible for every drug, anesthetic or other medication used on their patients in a hospital. If this decision stands, then each physician must personally analyze and pass on the content and character of all medications used on his patients during the patient's stay in the hospital. To correct this situation it is necessary to get the case before the Supreme Court of Ohio for a hearing. To do this calls for support from the organized medical profession in Ohio in making clear to the Court the importance of this case from the standpoint of the public interest, since the Supreme Court will not hear a case unless convinced of its wide public importance. The Council of the Academy has already adopted a resolution, calling upon the Council of the Ohio State Medical Association to employ counsel for the purpose of presenting a well-prepared brief on this subject and asking the Court to hear it."

INDIANA REGIONAL FRACTURE COMMITTEE

Report by D. R. Ulmer, M.D., Chairman

In 1936 we chose nineteen cities in Indiana in which to place units. The selection of cities was based on their geographic location, industries, accident rates, and availability of doctors who could and would put on fracture programs for the smaller county societies. This feature is to give doctors in the smaller places (who often see the fractures first) a chance.

The state was zoned and a certain number of counties allotted to each unit. Five doctors were appointed to each unit, the chairman of each being approved by the American College of Surgeons. Next we appointed doctors in outlying districts, so that the state would be well supervised from the fracture standpoint.

In appointing the committeemen, the regional chairmen received much help from the presidents of the county societies. An appeal was made to county secretaries urging them to have fracture programs for their respective societies, these to be conducted by the chairman of the unit in their sections. Programs using a projecting lantern for demonstration were urged throughout the state, with two to five county societies meeting in a designated place.

Instructions sent to each unit were as follows:

1. To have a committee of five physicians appointed by the president of the county society in each industrial center of the state.
2. To have each committee arrange with the county society to hold at least one meeting during the year on fractures.
3. To hold a called meeting at the state convention for the purpose of discussing plans and work for the ensuing year.
4. To see that the subject of fractures has a place on every state program, or else hold a special session.
5. To discuss at the state meeting the subject, "How the Local Unit Can Best Bring the Subject of Fractures before Its Local Society."
6. In case of a bad fracture in a dissatisfied patient and perhaps a threatened lawsuit, the attending physician may bring the matter before the local fracture unit for advice.
7. Each unit is to be prepared constantly with necessary equipment and organization for any emergency, whether isolated accidents or catastrophes, either local, rural or urban, or more widespread states of emergency. These preparations should include facilities for the adjustment and splinting of fractures before removal to hospital. "Splint 'em where they lie."
8. The committee should keep actively in touch with the treatment of fractures in the hospitals and see that each hospital is equipped for any fracture emergency.
9. The state committee shall co-operate with the national committee and render any service required of them.
10. That the fracture unit hold a fracture program in the counties surrounding its own county. Of course, any one or more of the doctors in a unit can be delegated to do this. This is a step in our educational program.
11. That the unit be called together and simplify the fracture treatment for each hospital, so that all doctors may benefit.
12. All treatment should be determined by results.
13. A follow-up is thus necessary. The results will be good, fair, poor.

14. This knowledge will assist in determining whether satisfactory work is being done.
15. Establish supervision of fractures in hospitals in accordance with local conditions.

Appoint a Social Service Auxiliary Committee Whose Duties Will Be

a. Interview fracture patient, discover any obstacle in his personal or family situation that would hamper continuity of treatment.
b. Explain fully to the patient what good end results mean in terms of patient's part in carrying out after-care plans, and the limitations of skillful treatment in case of severe injury.
c. Explain clinic follow-up, what the doctor wants the patient to do and why.
d. The doctor is working for a good functional result, the patient wants a good anatomical result; this may urge the surgeon to do an unnecessary open operation. The surgeon should decide upon the treatment to be employed. He is responsible.
e. Bring cheer and contentment to the long-confined patient by visits, books, magazines, papers, etc.
f. In case of the poor, look into the family situation, see that they are cared for. This gives the patient a mental rest.
g. When the patient needs braces, make it possible to get them. See his coworkers for help. As they call it, "Pass a paper."
h. If a man needs help with his insurance, compensation, or has lost his job, render such service as is necessary.
i. These are only a few suggestions. There are many other services that may be rendered. This committee should be appointed with the greatest care. The committee should always consult with the attending physician before acting.

Hospital Requirements

Emergency operating room open twenty-four hours a day.

Fracture table, fracture beds with attachments for traction.

Various splints including Thomas or its equivalent, methods for traction, stretchers, x-ray department, anesthetics, oxygen tank, plaster of paris bandages, apparatus for blood transfusion and hypodermoclysis, blood donors, antishock remedies, antiserums for tetanus, streptococcus and gas bacillus infections.

Complete fracture records and a follow-up system.

Hospitals will be rated as good, fair, poor.

Hospitals will be recommended to the American and state automobile clubs, as well as industries, railroads, etc. as per rating.

Ambulance Requirements

Stretchers, various splints including Thomas or its equivalent, blankets, sheets, bandages, cotton, adhesive bandages, small robes for traction, sterile dressings, antiseptics.

Ambulances will be recommended according to rating.

To date I have supervised the functioning of the State Committee alone, fearing to delegate this work to other doctors at a distance from Terre Haute.

At our next state meeting I expect to carry out further suggestions of the American College of Surgeons as follows:

To elect or appoint a doctor on the Regional Fracture Committee to represent each of the following subjects:

1. Medical schools. This will be an easy job if we can get a faculty member on the Committee.
2. Hospitals. This is a big job and should require an up-to-date man whom we hope to obtain.
3. Lay public. Instruction of Red Cross organizations, Boy and Girl Scouts, police, fireman, industrial workers, etc.
4. Ambulances. Assure the equipping of ambulances with traction appliances and their use by first aiders. This is the hardest job of all, but we feel it can be accomplished.

An account of all work done by the units will be kept and reports made to the Regional Committee, which, in turn, will summarize what has been done and report to the American College of Surgeons.

The Red Cross work done here has dovetailed nicely with the first aid fracture work. We have trained 151 Red Cross teachers and as a result now have 6,000 first aiders.

To mention all of the individual work, or even the work of the units, would take too much space. Suffice it to say that many fracture programs were rendered, hospitals inspected, interns' service investigated, ambulance owners urged to carry traction splints and first aiders.

WOMAN'S AUXILIARY

President—Mrs. W. E. Tinney, Indianapolis.
President-elect—Mrs. C. R. Bock, Muncie.
Corresponding Secretary—Mrs. Byron Rust, Indianapolis.
Treasurer—Mrs. C. V. Rozelle, Anderson.

OFFICERS OF THE WOMAN'S AUXILIARY OF THE WABASH COUNTY MEDICAL SOCIETY

President.....Mrs. G. W. Seward, North Manchester
Vice-President.....Mrs. Arthur Steffen, Wabash
Secretary-Treasurer.....Mrs. Lester Rhamy, Wabash
Press and Publicity..Mrs. G. Balsbaugh, N. Manchester



Mrs. Seward

The Auxiliary to the Wabash County Medical Society was founded March 3, 1937, at Wabash, Indiana, with a membership of 19 and now, with a membership of 20, has a consistently good attendance record at all meetings.

The group was formed mainly for social reasons —to bring the doctors' wives of the county into friendly contact. The meetings are held on the same night as the county medical society meeting, the first Wednesday of each month during the winter. Programs consist of a dinner, then a business meeting, followed by a social hour, with a book review or bridge or visiting. An active interest has been taken in the latest legislation and important medical topics of the day.

Last year in conjunction with the doctors the Auxiliary helped sponsor a meeting open to the laity, at Manchester College. After dinner, Pro-

fessor George Beauchamp of the college, a noted debater, gave a lecture on "Socialized Medicine."

In April, with the County Federation of Clubs, the Auxiliary sponsored a cancer control meeting held at the Indiana Hotel at Wabash.

Mrs. W. E. Tinney and Mrs. Fred Wishard were entertained at a luncheon at the Sheller Hotel in North Manchester, in April, and both gave interesting and instructive talks.

Allen County Auxiliary reports the celebration of their first year at a birthday party in May. The organization has shown a splendid growth under the leadership of Mrs. Herbert Ray, and plans to continue the good work with its new president, Mrs. E. A. King. The Auxiliary has been given a page a month for publicity in the *Caduceus* magazine. Mrs. Don Cameron and Mrs. Eugene Bulson were delegates to the national convention from Allen County.

Floyd County Auxiliary reports new officers as follows: Mrs. W. H. Garner, president; Mrs. J. P. Gentile, president-elect; Mrs. C. E. Briscoe, vice-president; Mrs. A. P. Hauss, secretary and publicity; Mrs. A. M. Baker, treasurer. Monthly sewing will be done in conjunction with the project of the hospital guild. Four yearly luncheon business meetings will be held, followed by a program with a speaker.

The new auxiliary to the **Lake County Medical Society** reports its second meeting held April 11, 1940, Nurses' Lecture Hall, St. Margaret's Hospital, Hammond, Indiana. Mrs. E. M. Shanklin, president, presided.

The following physicians were announced as members of the Advisory Board to the Auxiliary: Drs. R. N. Wimmer, F. J. McMichael and W. H. Howard.

Mr. Thomas A. Hendricks, Executive Secretary of the Indiana Medical Association, the guest speaker of the evening, was presented to the group. In his address, Mr. Hendricks outlined various ways in which the Auxiliary might serve as a useful appendage to the County Medical Society. He urged full-hearted effort behind any project the Auxiliary might launch and expressed his opinion that greater success would result from localized strength on one program at a time. He briefly sketched the high points of pending legislation affecting the position of the medical profession, and stressed the importance of keeping abreast of future developments. He commented on the fine spirit shown in organizing as an Auxiliary in order to better serve the Medical Society and closed by wishing the ladies full accomplishment of all their endeavors.

The Auxiliary Board elected was: Mesdames H. W. English, G. L. Verplank, R. M. Hedrick, from Gary; Mesdames A. W. Rhind, G. M. Cook, from Hammond; Mrs. J. S. Niblick, from East Chicago; Mrs. C. M. Jones, from Whiting; and Mrs. Neal Davis, from Lowell.

Marion County Auxiliary new officers are: President, Mrs. Fred Gifford; president-elect, Mrs. Karl Koons; vice-presidents, Mrs. G. W. Gustafson, Mrs. O. H. Bakemeier, Mrs. L. D. Bibler; recording secretary, Mrs. W. N. Wishard, Jr.; corresponding secretary, Mrs. E. W. Dyar; treasurer, Mrs. C. E. Cox.

Vigo County Auxiliary new officers are: President, Mrs. Floyd Riggs; vice-presidents, Mrs. E. L. Mattox and Mrs. O. L. Fuller; secretary, Mrs. Stuart Combs; treasurer, Mrs. James McEwen.

MRS. C. C. TAYLOR,
Press and Publicity.

SECOND COUNCILOR DISTRICT

The Second District Medical Association held its meeting at the Elk's Club in Sullivan, June 6th.

An old-fashioned chicken dinner was furnished by the Sullivan County Medical Society at 6 o'clock, after which the following program was presented:

1. "The Surgical Management of Complicated Thyroid Conditions." Goethe Link, M.D., Indianapolis.
2. "The Treatment of Brain Injury and Skull Fracture." E. Vernon Hahn, M.D., Indianapolis.

Dr. C. L. Boyd, of Vincennes, on behalf of Knox County, invited the Second District to be their guests next year. Dr. R. G. Moore, of Vincennes, was elected president. The present secretary, Dr. J. S. Brown, of Carlisle, was retained.

The addresses by Drs. Link and Hahn were greatly appreciated by the Association.

Fifty-five members were present.

J. S. BROWN, M.D., *Secretary.*

NINTH COUNCILOR DISTRICT

The annual meeting of the Ninth Councilor District of the Indiana State Medical Association was held May 16, at the Mudlavia Springs Hotel, Kramer, with eighty physicians in attendance.

The annual golf tournament was held at Harrison Hill Country Club at 8:30 a.m. with twenty-two golfers participating.

At 12:30 o'clock a Dutch luncheon was served in the Mudlavia new club house, to the delegates, members and their wives.

Dr. J. Roy Burlington presided over the business meeting. The minutes of the last meeting were read by the secretary and stood approved as read. Each delegate gave a report from his respective society. An invitation was extended by the Clinton County Medical Society to hold the next meeting at Frankfort. The invitation was accepted. The fourth Thursday in May (May 22, 1941) was selected by consent of the delegates as the date for the meeting.

The officers elected for the coming year were Dr. S. B. Sims, president; Dr. J. A. Van Kirk, vice-president; and Dr. F. A. Beardsley, secretary. Dr. Floyd Romberger was re-elected councilor for the Ninth District Medical Society by a unanimous vote of the delegates. Meeting was adjourned.

At 2 p.m. Dr. John E. Dalton, Indianapolis, led an interesting discussion on the "Treatment of Syphilis" with illustrating slides.

At 3 p.m. a movie film was shown by the State Board of Health.

At 4 p.m. Dr. Robert Moore, Indianapolis, discussed "The Significance of Chest Pain and Its Relation to Heart Disease."

After lunch the ladies enjoyed several games of bridge in the solarium of the Mudlavia Springs Hotel. They were also motored about the countryside where special points of interest were shown.

At 6:30 p.m. the annual banquet was held in the Mudlavia Springs Hotel dining room. Dr. J. Roy Burlington presided and Dr. Floyd Romberger was acting toastmaster. Dr. Romberger introduced the special guests of the evening. These guests included Dr. Karl Ruddell, president of the State Medical Association; Thomas Hendricks, executive secretary of the State Medical Association; and the guest speaker of the evening, former Lieut.-Governor Harold Van Ormand, who gave the principal talk of the evening. New officers of the Ninth District Medical Society were also introduced by Doctor Romberger. Golf prizes were awarded by Dr. John S. Hash.

The financial report of the society showed a balance of $6.57 in the treasury.

Respectfully submitted,

LEE J. MARIS, M. D., *Sec. and Treas.*

TENTH COUNCILOR DISTRICT

The Tenth District Medical Society of the Indiana State Medical Association met on Thursday, May 23, at the Woodmar Country Club, Hammond, Indiana.

The following resolution was presented and unanimously approved:

"Whereas, During the past fifteen years the Tenth District Medical Society, second largest in the state, has not been honored by the election of one of its members to the presidency of the Indiana State Medical Association; and

"Whereas, This Society includes in membership an outstanding physician who is highly deserving of this recognition because of his years of service to his county society as president and as chairman of many of its most important committees, to his district society as its president and as its councilor, and to the state association as councilor and as chairman of the Permanent Study Committee on Health Insurance and the National Medical Situation; who is especially qualified to assume this

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great responsibility for organized medicine in Indiana at this time in view of present unsettled conditions not only because of his wide acquaintance and experience, his far-seeing judgment, and his fine personality, but because he is Indiana's most profound student of medical economics; therefore, be it

"*Resolved*, That the Delegates from the Tenth District be instructed to recommend the election of Dr. N. K. Forster as president-elect for 1941 at the meeting of the House of Delegates of the Indiana State Medical Association in October, 1940."

It was determined to hold the fall meeting of the Tenth District on Thursday, September 26, 1940, at Phil Smidt's in Roby, Indiana.

The scientific program was opened at two o'clock in the afternoon, and was as follows:

"Safeguarding Adoption." Miss Margaret Emery, Lake County Department of Public Welfare, Gary, Indiana.

"Superficial Fungus Diseases." John Eric Dalton, M.D., Indianapolis, Indiana.

"Bleeding During Pregnancy." Carl P. Huber, M.D., Director of Postgraduate Education in Obstetrics, Indiana State Board of Health, Indianapolis, Indiana.

(Intermission—4 to 4:20.)

"A Clinical Evaluation of Bilesalt Therapy in Gallbladder Disease." Rollin H. Moser, M.D., Indianapolis.

"Neurological Examination of a Patient." Lewis J. Pollock, M.D., Chicago.

Dinner was served at 6:30. After dinner speaker was Morris Fishbein, M.D., Chicago, whose subject was "American Medicine and the National Government."

The total attendance numbered 110.

A. R. Kresler, M.D.,
Secretary.

LOCAL SOCIETY REPORTS

Dearborn-Ohio County Medical Society members held a meeting at Maple Inn, Aurora, June seventh. Dr. Harold F. Downing, of Cincinnati, talked on "Gastro-Intestinal Disturbances." Sixteen members were present.

* * *

Delaware-Blackford County Medical Society held a meeting at the Hartford Hotel, Hartford City, May 21. Dr. B. P. Weldy and L. E. Werry, of Hartford City, talked on "Rheumatic Heart Disease" and "Hypertensive Heart Disease," before the thirty members present. The annual picnic will be held in June.

Dubois County Medical Society held a meeting at the County Court House at Jasper, April twenty-fourth. Doctor J. Duffy Hancock, of Louisville, presented a paper entitled "Abdominal Masses in Infancy." Ten members were present.

* * *

Fayette-Franklin County Medical Society met at Magnesia Springs, Brookville, June eleventh. Dr. Howard L. Stitt of Cincinnati talked on "Diseases of the Ear, Nose and Throat in Relation to Systemic Disease." Attendance numbered sixteen.

* * *

Fort Wayne (Allen County) Medical Society met May twenty-first at the Methodist Hospital. Case reports were given by Drs. M. B. Catlett, B. M. Edlavitch, C. B. Parker, Leslie Wilson, Harry Harvey. Forty-five members were present.

Officers were elected at the annual meeting, May twenty-eighth, at the Chamber of Commerce Building. They are: President, Elmer C. Singer; vice-president, P. S. Titus; treasurer, Milton F. Popp; secretary, R. L. Hane; delegates: M. R. Lohman and William C. Wright; alternate delegates: C. B. Parker and R. W. Elston. Guest speaker of the evening was Mr. H. H. Gerding, pharmacist, who talked on "Isotonic Solutions." Sixty members were present.

* * *

Fountain-Warren County Medical Society members met June seventh for a catfish dinner at Covington. Papers were presented by Dr. Frank M. Gastineau and Dr. Norman Beatty, both of Indianapolis. Their subjects were "Eczema" and "Pathology and Treatment." A special feature of the evening was the viewing of murals in the court house; the murals are the work of Eugene Savage. Forty-four members were present.

* * *

Greene County Medical Society members held a meeting at Linton-Greene County Hospital, June thirteenth. Dr. Carl Huber of Indianapolis was the guest speaker, his subject being "Toxemias of Pregnancy." Attendance numbered fourteen.

* * *

Indianapolis (Marion County) Medical Society held a joint meeting in conjunction with the 8th Annual Postgraduate Course, Indiana University School of Medicine, at the Indiana University Auditorium. Dr. W. D. Stroud, of Philadelphia, talked on "Heart Disease."

May twenty-eighth a meeting was held at the Indianapolis Athletic Club. Speakers were Dr. Edwin L. Libbert, of Lawrenceburg, "Medical Appli-

(Continued on page xxiv)

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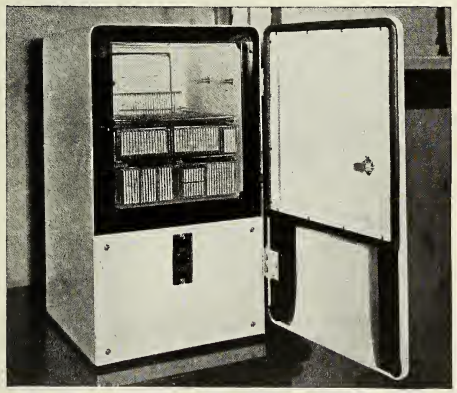
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*"Treatment of Acute Anterior Urethritis with Silver Picrate," Knight and Shelanski, AMERICAN JOURNAL OF SYPHILIS, GONORRHEA AND VENEREAL DISEASES, Vol. 23, No. 2, pages 201-206, March, 1939.

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cation of Physical Medicine," and Dr. Edwin N. Kime, "Surgical Application of Physical Medicine." Discussion was led by Dr. Edgar F. Kiser and Dr. Don D. Bowers.

* * *

Madison County Medical Society members met at St. John's Hospital in Anderson, May 20, 1940, to hear a symposium on goiter. Drs. T. M. Jones, C. S. Wright and Loyd Rosenbaum were speakers. Attendance numbered twenty-five. Dr. Miley appointed Dr. Perry Cotton, J. W. Fitzpatrick and Mark Hoppenrath of Elwood to be the committee to arrange for program and entertainment for the district society meeting, assisting Dr. L. G. Montgomery, of Muncie, and Dr. Sam Litzenberger, of Anderson.

* * *

Miami County Medical Society members held a meeting at Miami County Hospital, Peru, May thirty-first. Moving pictures concerning "Gonorrhea in the Male," and "Dark Field Diagnosis of Primary Syphilis" were shown. General discussion followed the showing of the films. Twelve members attended.

* * *

Monroe County Medical Society held a dinner and business meeting May twenty-ninth at Bosman's restaurant in Bloomington.

* * *

Perry County Medical Society met May twenty-eighth at Tell City. Dr. P. J. Coultas presented a paper entitled "Brain Tumor." Eight members were present.

* * *

Putnam County Medical Society members met at Greencastle, June thirteenth, for a business meeting. Fees for pre-marital examinations and other matters of interest to the assembled group were discussed. Eleven members were prseent.

* * *

Wabash County Medical Society held a dinner and business meeting, June fifth, at the Wabash Nurses Home. Eleven members were present.

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MODERN TRENDS IN THERAPEUTICS*

R. A. SOLOMON, M.D.
INDIANAPOLIS

The criticism has sometimes been made that the more recent graduates in medicine are not as thoroughly taught the subjects of pharmacology and therapeutics as in former years, and that the student of today is receiving nothing tangible in the art of therapy which will equip him for the practice of medicine. As proof of this contention the fact is cited that the young physician is unfamiliar with many of the drugs that the older doctor studied and applied in his daily practice. This is evident, they say, in the hospitals where the interns seem unacquainted with a large number of drugs that these physicians use and consider quite important. Is it possible that this point of view is the result of a failure on the part of these individuals to apply the same standards to the changing trends in the teaching and practice of therapeutics that they use in other branches of medicine?

The physician of the old school was quite adept with his pen and prescription pad, and could compound elegant mixtures containing numerous compatible ingredients which the young physician of today regards with a certain degree of awe and admiration. The writing of the prescription was the most important function of the physician of the past. We still see the results of this concept in the patient who will not pay for a most extensive examination unless a prescription is written at its conclusion. The careful bedside examination was made to elicit every complaint and symptom to the end that something could be incorporated in the prescription to relieve or counteract each one. It was, therefore, likely to contain many different drugs in small amounts but none in sufficient dose to have any profound pharmacological action on the body.

With the modern physician, the emphasis has shifted from the prescription to the diagnosis. The careful bedside and laboratory studies are made for the purpose of arriving at a diagnosis and determining the cause of the patient's illness. While cure of the patient remains the ultimate goal of the modern physician, his concept of good therapy is that it must be based upon and preceded by an accurate diagnosis. It assumes that if one is unable to determine the cause of a given illness, he must of necessity use many remedies symptomatically in order to relieve the patient; but if a definite diagnosis is established, the remedy becomes simple and definite in most cases, and is often limited to a single drug. The tendency is to give the required drug in amounts adequate for cure rather than to temporize with small doses.

All writers on materia medica and therapeutics show this trend to progressively curtail the number of drugs discussed in their books. In the preface to *Useful Drugs*, the handbook prepared under the direction and supervision of the Council on Pharmacy and Chemistry of the A.M.A., the authors state, "It has long been recognized that the great number of drugs and preparations of drugs presented to the attention of physicians is an evil." Cushny says, "There is no question that the insistence on numberless preparations of drugs of questionable value has discouraged interest in therapeutics." In the *Principles of Medical Treatment* written for use in Harvard Medical School, Shattuck begins with this foreword:

"He who masters the use of a few good drugs will succeed better than he who tries many at random."

"Before prescribing a drug, let the indications for its use be clear."

"Prescribe drugs singly when expedient."

Let us now consider some concrete examples which illustrate these changing trends in therapy. The middle-aged man with a late syphilis presented himself to the physician of the pre-Wassermann age with a very confusing picture consisting of the most protean manifestations of disease referable

* From the Department of Therapeutics, Indiana University School of Medicine.

to many organs or systems of the body. It was he of whom Osler said, "Know syphilis well in all its phases and everything medical will be given unto you." He may have come with such vague general symptoms as weakness, lassitude, loss of weight, anemia, headaches or mental depression. Skin eruptions of various types, low grade fever, pains in the bones and joints, enlargement of the lymph nodes, or disturbances of locomotion may have been present. The cardiovascular system may have been implicated with such manifestations as tachycardia, bradycardia, arrhythmias, Stokes-Adams syndrome, aortitis or aortic insufficiency. Or the symptoms may have pointed to the respiratory tract with hoarseness, aphonia, or cough. Anorexia, vomiting, abdominal pain or occult bleeding may have directed attention to the gastro-intestinal apparatus, and enlargement of the liver, jaundice, splenomegaly, ascites and hematemesis to the portal system. The genito-urinary manifestations could have simulated the clinical picture of an acute nephritis, a nephrosis, or a nephrosclerosis, or simply an orchitis may have been present. Disease of the meninges, the brain, the cord, the cranial nerves and the organs of special sense may have provided the presenting symptom. It is evident that the physician who was called upon to relieve a patient presenting many of the unrelated symptoms enumerated was required to know a great many remedies and to possess much skill in their application. But the therapeutic problem of the modern physician who would treat this individual has been immeasurably simplified. Having recognized that the treponema pallida is the single cause of all the varied symptoms which this patient presents, he proceeds to relieve them all by the use of a very few drugs—the iodides, bismuth and arsenic. Thus the improvement in diagnosis has here been followed by a simple specific therapy which has made unnecessary the large number of symptomatic drugs formerly in use.

Carrying a seriously sick patient with pneumonia through his illness for seven or nine days only to be faced with the management of the critical hours of the crisis was an ordeal which taxed the therapeutic skill of the ablest internist. As day after day passed and the effects of the severe toxemia began to exhaust the reserve of the vital organs and functions of the body, the conservation, support and stimulation of these functions became of the utmost importance. In the symptomatic care of such a patient one had to consider the questions of nutrition and diet, careful nursing, water balance, pain, restlessness, delirium, insomnia, cough, tympanitis, cyanosis, circulatory disturbances and numerous other symptoms arising incidentally during the course of the disease. To control these symptoms until the disease had run its natural course with recovery required a mature therapeutic judgment and a most comprehensive understanding of the action and application of many, many drugs. The treatment of the patient with pneumonia today presents a very different problem. We no longer care, from a therapeutic viewpoint, whether we are dealing with a lobar or a bronchopneumonia but instead we wish to know the specific bacterial cause of the disease. Is it a streptococcic or is it a pneumococcic pneumonia and if it is the latter, to which of the thirty-three types does it belong? Having obtained this information, usually from a sputum examination, we then apply specific chemotherapy with sulfanilamide in the streptococcic cases, sulfapyridine in the pneumococcic cases, with the additional use of type specific anti-pneumococcus serum where it seems indicated. As a result, if the diagnosis is established early, in twenty-four to thirty-six hours the patient is often practically well as far as clinical symptoms are concerned. The disease is over before sufficient time has elapsed for the toxemia to produce its deleterious effects on vital organs and functions. The need for the great number of therapeutic remedies formerly used in pneumonia no longer exists. There is not sufficient time for a failing peripheral circulation to occur, for anoxemia to develop, for toxic action on the medullary centers to become evident, and for collapse to occur. Consequently the many drugs formerly used to counteract these situations are no longer necessary in most cases. Accuracy in diagnosis here again radically simplifies therapy making unnecessary a large materia medica. In fact in many cases the only remedy used in this serious disease is one of the chemotherapeutic drugs with or without serum.

The treatment of the patient with an undiagnosed fever presents a good example of the changing trend in therapy. Instead of looking upon it as being harmful we now are inclined to consider fever a beneficent symptom as long as it stays within reasonable bounds. It is thought to be one of the evidences of the body's fight against an invading organism and to favor the production of antibodies and other immune substances by the defensive mechanism of the body. In fact, we daily produce artificial fever to aid in the cure of many diseases. In the past many drugs were used to counteract or reduce fever and its many symptoms and manifestations in the various organs and functions of the body. Today it is considered poor therapy to treat a fever as such. While we still see patients in whom we are unable to find the cause of a fever our aim is to reduce these cases to a minimum. The searching for and the discovery of the cause of the fever is the all-important part of the handling of the patient, after which specific therapy becomes quite simple. Very often chemotherapy with a single drug replaces large numbers of drugs used symptomatically. The surgical drainage of retained pus and the use of specific sera and antitoxins has still further reduced the necessity for a large number of nonspecific drugs.

Specific measures in the treatment of many of the other infectious diseases has markedly reduced the number of drugs one is called upon to use. Scarlet fever has lost much of its dread as a cause of death and of disabling complications with the

use of sulfanilamide and animal or human convalescent serum. Streptococcic throat infections with their spread by continuity to the sinuses, the ears, the mastoids and the meninges and blood stream invasion with spread to distant parts of the body have been brought under control by chemotherapy. Erysipelas no longer carries its high mortality as a result of sulfanilamide and ultraviolet irradiation. Even local and blood stream infections with the staphylococcus are being controlled and often cured by sulfathiazole. The local and systemic infections with the gonococcus seem to be responding well to specific treatment with sulfapyridine and its derivatives. Undulant fever is benefitted by specific vaccine therapy and tularemia by Foshay's specific serum, and as a result of chemotherapy meningitis carries with it much less horror than formerly.

The incidence of tuberculosis has been greatly reduced by preventing the contact of children with open cases of the disease with positive sputum. When the disease does occur, it is more commonly recognized in the early stages before much damage has been done and before marked constitutional changes have occurred. The necessity for much treatment of tuberculosis with drugs is usually absent. Indeed the National Tuberculosis Association lists in the order of their importance the factors of value in the treatment of tuberculosis as rest, good food, fresh air, peace of mind, and medicine. The drugs, you will note, are relegated to last place. Artificial pneumothorax, apicolysis, and thoracoplasty have still further reduced the need for drug therapy by mechanically aiding in local rest of the lung, obliteration of cavities, and cure of the disease.

The use of drugs in pediatric practice has almost disappeared except for chemotherapy and a very few other specific remedies. The work of the pediatrician has become largely one of preventive medicine. Most of the infectious diseases of childhood are prevented or attenuated by preventive vaccination. Dietetic management has eliminated the gastro-intestinal disorders of children. The deficiency diseases are prevented and the general resistance to infection improved by supplying adequate minerals and vitamins in the diet, or in concentrated medicinal sources. Even the common cold and its complications and sequellae are less frequent and less severe as a result of better nutrition, the emphasis on treatment by bed rest instead of drugs, and the realization of the harmfulness of the wide-open unheated sleeping room in the cold winter months.

Much progress has been made in the treatment of the anemias as the result of the advancements in hematology and the more rational newer classifications. We no longer speak of primary and secondary anemia but instead we seek in each case to determine the etiology in order that we may apply proper therapy. The normocytic normochromic anemia due to blood loss is corrected only by stopping the blood loss with or without the transfusion of blood. The hypochromic microcytic anemias are due to an iron deficiency and are relieved by the administration of ferrous sulphate or other iron preparations in large doses. The hyperchromic macrocytic group of anemias are due to a deficiency in the specific anti-anemia factor and are cured by the administration of liver extract or stomach preparations which are rich sources of this factor. Thus the size and color of the erythrocyte is of prime importance in indicating the proper therapy. It has come to be an accepted fact that without hemoglobin, blood count, color index, volume index, and mean corpuscular volume determinations, rational treatment of anemia is impossible. It is no longer considered good therapy to prescribe mixtures of liver and iron to all cases of anemia routinely. Liver and iron mixtures contain neither sufficient iron for the iron deficiency anemias nor sufficient anti-anemia principle for the group in which this substance is lacking. It is, in fact, a reversion to the gunshot prescription for a symptom of unknown cause and, when given to the patient with anemia before a definite diagnosis is established, so distorts the blood picture that the classification becomes very difficult. Furthermore, it becomes quite important that an accurate diagnosis of the anemia be made in order that one may properly advise his patient for the future since, if pernicious anemia is present, he must be advised to take liver extract in proper dosage the remainder of his life.

The modern therapy of cardiovascular disease shows many changes from that in vogue in the past, largely as a result of advancement in the knowledge of the causes of heart disease, better diagnosis, and the application of rational treatment. We are only interested in the anatomical diagnosis of mitral stenosis and aortic insufficiency insofar as they indicated the etiological diagnosis of rheumatic heart disease and luetic heart disease. For then only can we prescribe specific therapy in prevention and treatment. And we are equally interested in the physiological diagnosis and the estimation of the functional capacity of the heart, for these give us the information necessary for the application of the simple specific measures which are so effective in relieving the disturbances in cardiac function. The use of digitalis illustrates this point quite well. Most of us can remember the time when heart disease and digitalis were almost synonymous in that if an individual had something wrong with his heart he was given digitalis. In most cases it did no harm because the customary dose was a few drops of the tincture several times a day. But in the cases where the drug was really needed it did very little good because of the insufficient dose. The daily excretion was equal to the daily intake and no digitalis accumulated in the body and very little effect on the heart was obtained. Modern therapy with digitalis is based on the fact that there are definite indications for this drug, such as congestive heart failure, auricular fibrillation, etc. And when the

indications for its use are present it is given in sufficient dose to produce the desired effect upon the heart. In a similar way the use of all the other drugs employed in the treatment of cardiovascular disease has been restricted to definite indications based upon accurate diagnosis, thus reducing the number of drugs which the cardiologist uses in his daily work.

In the diseases of the respiratory system, similar changes in therapy have taken place. Treatment of cough or of bronchitis was formerly much in vogue. A large group of cough remedies and expectorants were adapted to various kinds of cough or bronchitis depending upon the quality and quantity of sputum, the number of layers into which the sputum separated on standing, and many other differences. A majority of the drugs in this group have been deleted from the pharmacopeia and from recent text books. We are no longer satisfied with a diagnosis of chronic bronchitis. Better histories, more careful physical examination, more frequent use of the roentgen rays, the introduction of the bronchoscope in exploring the bronchial passages and in removing material for culture and biopsy, and the visualization of the bronchial tree by the introduction of lipiodol have brought about more accurate diagnosis in diseases of the respiratory system. Instead of bronchitis, such diagnoses as bronchiectasis, abscess, tuberculosis, primary bronchogenic carcinoma, congenital cystic disease of the lung, etc., are being made. With the establishment of an accurate diagnosis, therapy takes on a more rational character and such measures as postural drainage, bronchoscopic aspiration, lobectomy, thoracoplasty and treatment with specific chemotherapeutic drugs replaces an endless number of nonspecific symptomatic remedies.

Similar advances have come about in the management of the gastro-intestinal disorders. Improvement in diagnosis aided by x-ray studies, examination of the aspirated gastric contents, visualization of the gall bladder and exploration of the lower bowel by the sigmoidoscope and even the more recent inspection of the gastric mucosa through the flexible gastroscope all have tended to bring about accurate and specific diagnosis of the lesion producing the symptoms of which the patient complains. Obviously large numbers of symptomatic drugs used here to relieve or correct this or that symptom are replaced by specific medical or surgical treatment directed at the cause. One no longer treats diarrhea or dysentery. Stool examinations, sigmoidoscopy cultures, search for parasites, and blood studies help to elucidate the cause and form the basis for rational therapy. Simply giving the patient one of the large number of cathartics so commonly used and abused by both the physician and the layman is no longer considered good treatment of chronic constipation. It is recognized that this is only a symptom, the cause of which must be determined if proper treatment is to be applied. Laxatives have largely been replaced by dietary prescriptions, general hygienic advice, exercise, and regulation of the patient's habits and general mode of living. If used at all drugs are relegated to a minor position and are more apt to consist of the simpler mucilaginous substances which act by lubrication and by retaining water and increasing the bulk of the intestinal content with a mass of softer consistency. Or the drug therapy may be directed against the underlying mechanism and may consist of antispasmodic drugs like belladonna and the milder sedatives.

A clearer understanding and classification of the diseases of the kidney has done much to simplify the treatment of these conditions. The management of edema in particular is now on a much sounder basis since the distinct mechanism of its production in the cardiac, renal and nutritional states has been worked out. The newer urinary antiseptics—sulfanilamide and its derivatives and mandelic acid—have changed the course of infection of this tract. Blood chemistry, tests for kidney function, the study of the blood proteins, ureteral catheterization and pyelography have played a large part in putting the disturbances of the urinary tract on an accurate basis. One no longer treats pyuria, hematuria, albuminuria or edema as such for modern therapy insists that these are only symptoms on an underlying specific entity against which treatment must be directed.

In the field of the deficiency diseases even more startling changes are taking place. Not only are the definite deficiency syndromes like pellagra, scurvy, rickets, etc., being cured by the administration of the appropriate vitamin but a large group of vague disorders now identified with borderline deficiency states that were formerly treated with numerous symptomatic remedies are often relieved of the whole picture by the administration of a single substance. It seems reasonable to predict that specific vitamin therapy will in the future still further displace many remedies used symptomatically at the present time.

The clearer understanding of the diseases of metabolism resulting largely from advancements in physiological chemistry has resulted in great improvement in the management of these disorders. The discovery of insulin changed over night the outlook of the patient with diabetes. It has not only added to his comfort of living but has practically prevented the serious complications which required so much medical and surgical therapy in the past. Specific therapy in many of the endocrine disturbances has greatly simplified their treatment. One need only recall the patient with a toxic goiter. In times past she required much medicinal therapy to control the weakness and fatigue, the nutritional disturbances, the nervous symptoms, the cardiovascular manifestations, the gastro-intestinal symptoms, etc. But now, after proper preparation with iodine, the surgeon performs a subtotal thyroidectomy and practically all the symptoms vanish and with them the need for medicinal therapy. On the other hand, the patient with myxedema with his sluggishness, his low blood pressure, anemia,

increased heat tolerance, obesity, and many other vague symptoms and complaints is often spectacularly relieved of the whole picture by the oral administration of thyroid extract.

The basic causes of allergy are still a mystery, and until these are discovered no rational therapy can be applied. However, symptomatic treatment has made much progress in this group of disorders. Many unexplained symptoms and signs have been shown to be the result of the contact of the individual with a certain substance to which he is hypersensitive or to the ingestion of foods or drugs to which he has an idiosyncrasy. If he is prevented from coming in contact with these substances, or if his sensitivity to them is reduced by gradually increasing doses of the substance, the symptoms disappear. In this way the need for many drugs formerly used to control these allergic manifestations has ceased to exist. Recently the question of potassium-sodium balance, the role of histamine and the use of an inactivating enzyme-histaminase —are all being investigated and therapeutically tried, with results that cannot yet accurately be gauged.

As a result of better diagnosis and increased knowledge, the treatment of both the functional and organic diseases of the nervous system has become much more effective. The great group of functional disorders which make up so large a part of the physician's practice are recognized as being the somatic manifestation of underlying fears and anxiety states and are being treated intelligently by a psychiatric approach instead of with sedatives and hypnotics to the point of intoxication. The feeling of hopelessness that was formerly associated with the organic diseases of the nervous system no longer exists. Vitamin therapy in the deficiency diseases, chemotherapy for many of the formerly fatal infections and antiluetic therapy have all changed the outlook in disease of this system. Accuracy in diagnosis has been brought about by a more frequent application of spinal puncture, by x-ray studies of the head and spinal column, by encephalography and ventriculography, with the result that the neurological surgeon is now able to cure many formerly hopeless conditions.

The changes that have taken place in the practice of therapeutics in the past are only an indication of what the future holds in store. As the science of medicine continues to progress and as the causes of more and more diseases are discovered and specific remedies are found to counteract them, in just that degree will the number of drugs in daily use by the physician continue to decrease.

A prophesy of what the future of therapeutics has in store was made by Dr. Rene Dubos of the Rockefeller Institute for Medical Research before the American College of Physicians in Cleveland recently. He found that the dissolution of organic matter by the soil is due to the great variety of micro-organisms present, each variety capable of doing a special job of dissolution. He introduced type three pneumococcus into samples of soil and found that one particular microbe developed a chemical or enzyme capable of dissolving the capsule of type three pneumococcus only; and when this chemical was given to mice, it protected them against a million deadly doses of type three pneumococcus. Dubos then found an organism in the soil capable of destroying the entire family of gram positive bacteria. He isolated from this soil organism certain chemicals which destroyed the gram positive bacteria as effectively as the parent organism. This chemical which he named Gramicidin was purified and obtained in crystalline form. The substance has been found capable of protecting mice against infection with virulent pneumococci and streptococci of all types. Dr. Dubos believes he has found a new principle, named by him the "adaptive production of enzymes by bacteria." He hopes that one will eventually discover soil organisms capable of attacking other types of pathogens such as gram negative bacilli, acid fast bacilli, viruses and even remotely possibly cancer cells, and that the active substance by means of which they exert their antagonistic effect will be isolated. An understanding of the chemical nature of these agents and of the mechanism of their action may provide new clues for the rational development of chemotherapy.

In conclusion, I believe that the graduate of today is better equipped to treat his patients effectively than was his predecessor. It may be true that he is not acquainted with as many drugs as was the graduate of thirty or forty years ago, but this is because he does not have the need for them. Accuracy in diagnosis simplifies therapy. One drug which is specific for the underlying cause of a disease may replace and make unnecessary a dozen drugs used to relieve the protean manifestations of that disease when its etiology is obscure. Therapeutics cannot remain stationary but must progress with the general advances in medicine.

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THE MANAGEMENT OF COMPLICATED THYROID DISEASE*

GOETHE LINK, M.D.
INDIANAPOLIS

Thyroid disorder is so general (probably fifty per cent incidence in this state) that it must frequently be found associated with whatever else ails the patient. Also, there is an interrelation between thyroid disease and any other disability present. Thus, if a patient with a slumbering, quiescent goiter gets into any kind of trouble, it tends to provoke the goiter into activity and, on the other hand, the patient who becomes actively thyrotoxic will break down first in those organs which are weakest or which already harbor disability. It therefore follows that an uncomplicated thyroid case is unusual, and that our problem is often not clear cut.

The newborn may have goiter in which case, because of the delicate size of the trachea and larynx, swallowing and breathing are both interfered with, more especially swallowing, and thyroidectomy may be imperative. There is a belief which is quite general that the enlargements of the thyroid gland which children frequently have are of no consequence. That is true in many instances as the gland usually returns to a normal state without interference, but when the goiter in a child becomes actively toxic the case must be treated on its merits; if the toxicity persists, thyroidectomy may be needed. This includes all ages of children. A very severe hyperthyroidism often occurs in this group. The ordinary method of obtaining the basal metabolic rate will not apply here. The results of operation are as good as in the adult. There is no stunting of growth resulting from the thyroidectomy.

A moderately toxic goiter in an aged individual becomes unduly important when there is disturbance of metabolism and a progressive loss of weight. The patient soon becomes confined to bed from weakness and, like the old horse that gets down, never gets up again. Old people stand thyroidectomy well and should have their chance, regardless of age. This applies to those between eighty and ninety as well as to those in the seventies.

Another physiologic state frequently complicated by toxic goiter is pregnancy. Pregnancy stimulates the thyroid gland, and if there is a quiescent, diseased thyroid present, it may become active. Not only is the toxicity a serious menace up to the time of the baby's birth but the cares of an infant are such as to make a toxic goiter worse. With an elevated metabolism it is difficult for the mother to produce milk either of normal quantity or quality. Thyroidectomy can be done safely up to the seventh month of pregnancy, and it not only lessens the danger during the puerperium but also puts the mother in condition properly to care for her child.

It has been shown that goitrous women have a high percentage of offspring with mental deficiency. In mild cases of thyroid disease, with small goiters, many obtetricians correct the thyroid dyscrasia as far as possible by giving iodine or desiccated thyroid. Thyroid is needed in those cases of pregnancy in which, due to the disease of the thyroid gland, it can not respond to the stimulation of pregnancy, as the thyroid is not developed in the fetus until late and the mother must supply thyroid both for herself and for the fetus. If, however, there is an excess of thyroid, iodine is indicated.

Among the disease conditions frequently found complicated by toxic goiter are tuberculosis, diabetes, and hypertension. It is difficult for a patient to combat tuberculosis in the presence of thyroid disease. A gain in weight and good nutritive function is the best defense against tuberculosis; it is this particular function that is undermined by a goiter. After thyroidectomy, a patient with pulmonary tuberculosis will gain weight and is more able to cope with the tuberculosis.

In diabetes the metabolic disturbance is most important; however, there is a specific difficulty in diabetes with goiter as thyroid disease reduces the ability to metabolize carbohydrates and sometimes produces a glycosuria though diabetes is not present. Diabetes is always worsened by the presence of thyroid disorder. After thyroidectomy diabetes is more easily controlled, and the insulin need is reduced.

Hypertension is one of America's besetting disabilities. Even a mild degree of thyroid intoxication threatens the life of an individual who is doing everything possible to keep going in spite of hypertension. Thyroid stimulation further raises the level of blood pressure and drives the heart more forcefully against the obstructed circulation. Toxic goiter will produce hypertension which is characterized by a moderately high systolic and a low diastolic, for example, 160/40. In this condition relief is brought about by thyroidectomy, after which the systolic pressure comes down and the diastolic rises until normal is approached.

Where the hypertension is not due to thyrotoxicosis but is made worse by it, we can not expect the blood pressure to return to normal after thyroidectomy but the level will be reduced. For instance, the pressure may come down from 240/110 to 180/100; thus the life expectancy is increased. Frequently it is difficult to decide how much of the patient's disability is due to the hypertension and how much is due to the goiter. Inasmuch as many in this group have a bad outlook and are incapacitated, they soon ask the surgeon for any relief that

* Read before the Second District Medical Society meeting at Sullivan, June 6, 1940.

thyroidectomy may give. Hypertension, even in severe degree, does not add much to the danger of operation.

Patients with gall-bladder disease are prone to have active goiters and when both conditions are active that patient is certainly between the devil and the sea. It is usually better to get the goiter out first, taking advantage of a lull in the gall-bladder trouble.

It is dangerous to subject a patient with toxic goiter to any kind of surgery without first placing the thyroid factor under control. The same danger may arise in injury such as fracture. When a patient who has been injured has a goiter and the pulse remains too rapid, the administration of iodine may be helpful.

A toxic goiter may also be a factor in febrile diseases and may require treatment along with that indicated for the primary trouble.

There are some less common conditions which are peculiarly made worse by thyroid intoxication. In Parkinson's disease with goiter, for example, the tremor becomes much aggravated and, though thyroidectomy can not cure the patient, it causes a great improvement in all symptoms.

Many heart conditions occur to complicate thyroid disease, but thyroid disease may be called a complication when it is acquired by an individual who has a rheumatic heart. The manner in which one may live for years by properly caring for a rheumatic heart always excites our admiration for the compensation of nature. The individual with a crippled heart can ill afford the added burden of the thyroid stimulation with forceful heart action and resulting muscle fatigue, and thyroidectomy becomes necessary.

The eyes, when there is an error of refraction, are often disturbed so that the error is constantly changing and glasses can not be properly fitted for any length of time.

In many of the conditions complicated by toxic goiter, thyroidectomy must be done before the primary condition can be controlled. At other times there is not time nor favorable conditions for operation on the goiter and then medical treatment is proper. In all accidental traumata, in febrile diseases, in acute cholecystitis or appendicitis, in pregnancies where you are consulted in the late months, and in many other conditions too numerous to mention, have an open mind for symptoms which are due to a complicating thyroid disease and institute treatment when it is found.

The very nature of thyroid disease is to produce somatic exhaustion and any organ which may have been weak from previous causes breaks down and produces a complication which may overshadow the thyroid disease in importance.

In every toxic goiter there is a psychic stimulation usually manifested by exhaltation, less frequently by depression. This factor in an individual whose mental state is not firmly fixed may result either in a true mania with excitement or in a depressive psychosis. In six thousand thyroid operations there have been twenty-five cases which would be considered legally to be *non compos mentis*. These do not include the delirious state of hyperthyroid crisis. A few of these cases have been so violent that they had to be restrained; all were unable to adjust themselves to their surroundings and were incapacitated. The result of thyroidectomy in the group with exhaltation has been excellent. A patient who is maniacal, noisy, and hard to control will usually become quiet and rational five or six days after operation; some have required several months to become readjusted. The depressives do not give such good results and should be regarded from a surgical standpoint in a very circumspect manner. There has been no operative mortality in this group with psychosis. Every care must be taken in operating upon the insane patient to determine that the insanity followed and was caused by the toxic activity of the goiter. The incidence of insanity with toxic goiter has been larger in women than in men, exceeding the relative incidence of goiter.

Eye complications are common. Exophthalmos is not always but is often present, and may range from a stare to a dislocation of the ball from its socket. It may be bilateral or unilateral. In goiter, exophthalmos occurs chiefly in two ways: in one, the most common, there is a muscular contracture of the extra-ocular muscles probably due to sympathetic nerve irritation. In this variety there is a prompt and certain return to normal after thyroidectomy. In the other variety there is a lymphocytic infiltration of the extra-ocular muscles which become eight or ten times their normal size and, by their crowding effect, push the eyes forward. This condition may progress after thyroidectomy and when the patient's metabolic rate is on the minus side. Why these muscles are selectively infiltrated is not known; other muscles are not so involved. The lymphocytes become changed into connective tissue so that the extra-ocular muscles are soon large bundles of scar tissue and thus this type of exophthalmos may remain permanently. There may also be a permanent and extreme strabismus. Fortunately, extrusion of the eyeball is rare, though we frequently see patients whose eyes remain open while they sleep.

Bizarre eye complications occur which the oculist is unable to explain but which emphasize the close relation between thyroid disease and the eyes. For instance, one patient had an episcleritis in which the entire whites of both eyes were fiery red; these returned to normal after thyroidectomy. Twice I have seen the conjunctivae swell after thyroidectomy and become edematous masses extruding between the eyelids and exuding a purulent serous discharge. The cornea was completely hidden and while the condition looked most alarming they both cleared up after a few days. Cataract occurs in toxic goiter but it is rare.

Focal infections are found so frequently with toxic goiter that one is inclined to suspect that there is a cause and effect relation. Teeth, tonsils,

and sinuses when infected may cause a goiter with toxicity; undoubtedly such infection makes worse a goiter which is already present. Not only do they aggravate the toxic symptoms of a goiter but they will also cause a continuation of these symptoms after thyroidectomy if the infection remains. For this reason all dental infection must be cared for before thyroidectomy. Since tonsillectomy may produce a thyroid crisis, it is best done after the goiter has been removed. To the extent that suppurative sinusitis is almost incurable in this climate, it is also next to impossible to get a satisfactory result from thyroidectomy in such an unfortunate patient. Dental sepsis coming up ten years after thyroidectomy will cause a return of thyroid symptoms without any change in the thyroid stumps.

We will not consider complications which are found rarely, nor will we consider carcinomatous degeneration of goiters (which is far from rare) nor strumitis, an inflammation attacking old nodular goiters with high mortality, all of which are important reasons for having goiters removed before they get that way.

Of all organs in the body, the one which is always disturbed is the heart. In toxic goiter we may have absence of one or more symptoms, a fact which I called to your attention in 1933 in an article entitled *Clinical Variations in Thyroid Surgery,*[1] but the one constant is tachycardia. It naturally follows that heart complications are the most frequent and the most important of all.

Since the goiter surgeon has to deal with many goiter hearts he is obliged to study the heart carefully in each case. Several years ago I thought I would have all my troubles lifted when I went to hear a great cardiologist lecture on the thyroid heart. He began by saying, "Thyroid intoxication does not produce heart disease." Quite recently I heard another from whom I hoped to get help. When he came to thyroid as a cause of cardiac disability, he dismissed it with a wave of the hand and a statement that it was a "toxic state which should be cured or better anticipated by removing the goiter." What more should a surgeon ask for?

Sir Thomas Lewis in his book on *Diseases of the Heart* devotes little more than four pages to the "Thyrotoxic State." Means, in his six hundred page work on *Thyroid and Its Diseases* devotes eight pages of reading matter to "Cardiac Insufficiency" and says, "It seems to us that the weight of evidence favors the view that thyrotoxicosis per se does not cause the heart to fail." Also: "The quite normal heart thus tolerates thyrotoxicosis indefinitely." He then states that "thyrocardiac disease then is to be looked upon as failure produced by the advent of thyrotoxicosis in a person with an already damaged heart." In speaking of fibrillation, however, Means quotes Kerr as finding fibrillation in one-third of all cases of toxic goiter and then states that "long continued fibrillation may of itself lead to congestive failure through the decrease it causes in the efficiency of the heart beat."

The heart more quickly and more certainly exhibits effects of thyroid disorder than any other organ. Increased rate, real or relative, is always present. There are other functional derangements of the heart in toxic goiter, some of which may have serious consequences.

A very common symptom found in the mild chronic form of toxic goiter is precordial pain on effort. This may be present in a slight, annoying degree or it may be so severe that it incapacitates the patient. This symptom has been described by so many patients who have obtained relief by thyroidectomy that it can not be imaginative. Some who have observed this symptom think it is merely a fatigue pain; others think it is caused by improper nourishment to the heart muscle due to a disturbed carbohydrate metabolism.

A very important and common disturbance of the heart's action is auricular fibrillation. This may occur very early though it is usually a late symptom and is most common in those nodular goiters which have become active after twenty or thirty years of supposed harmlessness. Fibrillation may come in attacks or it may persist for days and weeks. If it continues it produces cardiac failure with breathlessness and venous congestion, anasarca, and enlargement of the liver. That these patients return to a nearly normal circulatory state if thyroidectomy is done is apparently the reason cardiologists say that toxic goiter does not produce heart disease. If thyroidectomy is not done, however, the patient may die from congestive failure.

In treating the cases with congestive failure, in order to prepare them for operation, digitalis and Lugol's solution are given. In those cases not yet in failure, Lugol's solution alone will frequently arrest or modify the fibrillation. No attention is paid to fibrillation in toxic goiter and no effort is made to stop it unless failure is present or threatening. Many patients who have fibrillated only occasionally and some who have never fibrillated will fibrillate after operation; no harm results and it stops as soon as the postoperative reaction subsides, without specially directed treatment. Where a patient has fibrillated for a long time, it is dangerous to arrest the fibrillation with drugs such as quinidine as clots may be swept out of the auricle, causing thrombosis. This is more apt to happen with quinidine than with digitalis. Though the typical cardiac congestive failure in toxic goiter is usually the result of auricular fibrillation, we may have an equally bad state due to failure from overaction of the heart and persistent tachycardia in the presence of thyroid intoxication.

Whether or not the heart muscle is diseased, it must relax and dilate since all the valves become incompetent. The valve cusps are not distorted as in rheumatic disease and incompetency is due to enlargement of the orifices from relaxation.

In preparing these cases for surgery, frequently every resource of medicine and surgery must be

[1] Lirk, G.: The Jour. Ind. State Med. Assn. 26: 18; 1933.

invoked. There must be a correct estimation of the patient's hyperthyroid state and what the post-operative reaction will be. The patient's cardiac reserve, if any, must be properly estimated. Stage operations may be needed. In fact it is a job in which the patient needs the cooperation of both cardiologist and surgeon.

The management of a case of goiter heart requires study and individualization. It will be easiest to illustrate this by means of a composite hypothetical case.

Mrs. X, age 65, recalls that thirty years ago she consulted her family doctor for a swelling in her neck which he told her was a "simple" goiter. He gave her some medicine and emphatically told her: "Never bother that until it bothers you," mistaken advice which has indirectly caused many deaths. Later she passed a shed snake's skin around her neck, buried the dish-rag behind the smoke-house and wore a string of amber beads around her neck, and the goiter disappeared and was forgotten.

A history carefully taken now shows that during the preceding twenty years she had several periods of indisposition characterized by loss of weight and bordering on a nervous breakdown. Between these periods her health was good. These we interpret as periods of goiter activity.

Last winter she had a mild attack of "flu" from which she recovered but, unfortunately, when she was able to be up and around, she fell down the cellar stairway and, though she suffered no fracture, she was confined to her bed for a time and never has regained her strength. Also instead of regaining her weight, lost from the "flu," she has continued to lose and from weighing 150 pounds she is now down to 120 pounds in spite of diet and rest.

For some time her physician has noticed that her heart, which was faster than he thought it should be during her mild attack of flu, has remained too fast after fever has subsided. Her ankles have begun to swell and an irregularity of heart action is found. Due to her loss of weight the upper end of a nodular goiter is barely seen in the base of her neck just above the clavicle and sternum. Her physician notices this and, suspecting that it might be a factor in her trouble, puts her on Lugol's solution. He also gives her small doses of digitalis. The patient improves and, being frugal, she gets up and goes about her business and stays clear of her doctor for about six months. She then begins to feel worse and finds that the swelling in her feet and ankles is increasing. Her breath is so short that she can no longer get up and down the short flight of cellar steps. She notices that her abdomen is larger. Finally she goes to bed and again the doctor is called. He finds her in cardiac failure with auricular fibrillation and anasarca. Everyone becomes alarmed and a heart specialist is called. The cardiologist has her taken to the hospital.

Examination shows a large nodular goiter, all of which is so low in her chest that only one nodule on the right side comes above the clavicle to any extent. The goiter is soft and movable. She has all teeth out except eight carious and pyorrhoeic front teeth and three molars rotted off even with the gum.

The advice is given that, in addition to the medical treatment directed by the cardiologist, the teeth must be removed one at each sitting and it is hoped that by the time they are all out and the sockets healed she may be ready for surgical attack on her goiter.

This takes several weeks' time and it is not our purpose to describe to you the treatment used by the cardiologist. No doubt she is digitalized and a sustaining dosage continued. Her nervousness is modified with sodium bromide. She is fed carefully with an ample number of calories. Nothing is withheld from her diet because of her blood pressure which was 198/0 when she came in. When her condition is as good as the cardiologist can get it, she is still fibrillating although her ascites has disappeared and her liver extends only a finger's breadth below the ribs.

The patient is examined carefully to decide which side will come out the easier. The morning of operation, at 7:00 a. m., the patient is given morphine gr. 1/4, hyocine gr. 1/100. The operation is started promptly at 8:00 a. m. If it is needed, an additional dose of morphine gr. 1/8, hyocine gr. 1/200 is given hypodermically. With local anesthesia, novocaine ½%, one side is removed. An all silk technic is used, the wound being closed without drainage. The skin is closed with clips and the operation finished as quickly as is consistent with careful hemostasis. When the patient is returned to bed, she is given 1500 cc. normal saline solution with 5% dextrose, intravenously. She is placed in an oxygen tent. Food is given by mouth as usual. If she does well, she may be out of bed in a chair the next day. On the third post-operative day the clips are removed. She goes home on the fifth or seventh day.

The other side is operated in very much the same manner three or four months later. The second operation always entails much less risk because of the gain in weight and general improvement which follows the first. The patient regains her weight, fibrillation ceases, and she is as well as a woman can be who has carried a goiter for thirty years.

SUMMARY

The various conditions in which thyroid disease may be a factor requiring recognition and treatment are related.

Complications which make the management of thyroid disease more intricate and difficult are discussed.

An hypothetical case is given which is intended to point the following facts:

1. The socalled simple goiter of former years is the cause of complete physical bankruptcy today.
2. Beware of the goiter that disappeared or was charmed away; it is probably under the patient's sternum, out of sight but not out of action.
3. Many recurring attacks of nervous prostra-

tion and breakdown are exacerbations of activity of an unsuspected "simple" goiter.

4. An old nodular goiter is like a stick of dynamite. Explosion may be brought on by dental sepsis, intercurrent sickness, worry, grief or falling down the cellar steps.

5. Loss of weight in the later years of life is a serious matter. This may occur from a moderate elevation of the basal metabolic rate, say plus 25 or 30. It soon puts an old person in bed from weakness.

6. Fibrillation due to toxic goiter may, in advanced cases, lead to severe cardiac failure with enlarged liver, extensive edema of the lower part of the body, ascites and death.

7. A heart in this condition will respond to treatment so that the toxic goiter may be removed safely.

8. Whatever may be the condition of a goiter heart in severe failure, it can return to normal after the toxic goiter has been removed.

219 N. PENNSYLVANIA ST.

ENDEMIC ASTHMA DUE TO SOY BEAN DUST†*

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GARY

Each year brings new uses for soy beans and their by-products. They are used for making industrial products such as enamel, varnish, glue, printing ink, rubber substitutes, linoleum, insecticides, plastics and celluloid. Soy bean meal is used in the preparation of foods for human consumption and include wheat substitutes, infants' foods, diabetic foods, flour mixtures, soya sauces, meat sauces, macaroni and coffee substitutes. The meal is also used to a great extent as animal feed and as fertilizer.

Positive skin reactions to soy bean are not uncommon, since a large number of these reactions are the response to the common antigen found in the bean family. An individual with clinical allergy to bean or pea may give a reaction to soy bean which may be of no clinical importance. Duke found that among allergic persons soy bean reactions occurred in approximately the same proportion as reactions to beans, peas and the other members of the legume family and appear to be part of a group reaction. However, clinical allergy to soy bean is probably not uncommon, and may be a more frequent factor than is evidenced by the reports in the literature.

In 1934 Duke[1] reported five patients who were subject to cough and asthma while working in a soy bean mill. One patient was extremely sensitive to soy bean. His residence was on one side of the mill and his office on the other and, depending upon the wind direction, he would have asthma at his home or in his office. In discussing Duke's paper, Piness referred to soy bean sensitivity among infants fed on artificial foods containing soy bean powder. Olsen and Prickman[2] reported another case of soy bean sensitivity in a laborer who developed asthma while working on a wrecked soy bean mill. Away from the plant he was free of these attacks. Wightman[3] reported a patient with asthma who had his attacks only while working in a shipping room adjacent to a storeroom where bags of soy bean meal were stored. The patient's asthma began at the time the meal arrived. Feinberg[4] has under his care a farmer who has seasonal attacks of asthma from the handling of seeds. However, among other dusts, soy bean dust will give him asthma outside of season.

The history of the following case is somewhat different from those that appear in the literature. All the cases previously reported developed their sensitivity while in close contact with the offending allergen; my patient lives more than a mile from a soy bean mill which is the source of his trouble. This patient is analogous to Figley's[5] patients who developed endemic asthma due to castor bean dust. In 1928 Figley and Elrod reported thirty cases of asthma that were proved to be caused by the inhalation of finely powdered castor bean dust. These patients all lived within a mile radius of an East Toledo linseed and castor oil mill which was found to be the immediate cause of their trouble.

CASE REPORT

A man, aged 30, was first seen in January, 1939, complaining of sneezing and asthma for the last eighteen months, more severe in the last two months. The attacks are fairly constant the year around, but are much worse in the summer. However, on several occasions, while on vacation away from the city, he was entirely free of asthma. He never has asthma while at work. Usually he goes to bed feeling well, but awakens during the night

† Read before the Chicago Society of Allergy, February 19, 1940.

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[1] Duke, W. W. Soy beans as Possible Important Source of Allergy, *J. Allergy*, 5:300-302. March 1934.

[2] Olsen, A. M. and Prickman, L. E. Hypersensitivity to Soy Beans, *Proceed. Staff Proceedings Mayo Clin.*, 11:465-468. July 22, 1936.

[3] Wightman, H. B. Soy Bean Sensitivity with Case Report (Asthma) *J. Allergy*, 9:601-603. Sept., 1938.

[4] Feinberg, S. M.: Personal Communication.

[5] Figley, K. D. and Elrod, R. H. Endemic Asthma Due to Castor Bean Dust, *J.A.M.A.*, 90:79-82. January 14, 1928.

with a stuffiness of the nose, sneezing, cough, and shortness of breath. These symptoms entirely disappear while at work. His place of employment is about seven miles from his home. Physical examination revealed a fairly well built man, and findings were normal except for occasional wheezes throughout his chest.

Routine cutaneous testing gave the following results: Marked reaction to soy bean; the size of the erythema was 4½ cm. by 7 cm., while the wheal with pseudopods measured 1¾ cm. by 1½ cm. Moderate reaction to peas. Mild reaction to the other members of the leguminosae family and to plum and eggplant.

Passive transfer to the serum of this patient to a nonallergic individual and subsequent intracutaneous tests on the sensitized sites gave the following results:

Soy bean extract 1-100,000	++++
Navy bean extract 1-100	O
String bean extract 1-100	±
Lima bean extract 1-100	±
Pea extract 1-100	+

In spite of the negative reactions to the various feathers both by scratch and intracutaneous testing, the patient was advised to remove the pillows from his bed and to have the mattress covered. This failed to give any relief. He was then advised to avoid the bean family, and a list of all the foods and material containing soy beans was given him. This also failed to yield any apparent relief. Just how soy beans and the other legumes entered into this picture, and why his symptoms came at night, and occasionally on Sunday, were unsolved questions at first. It was not until several weeks later that he mentioned that there was a soy bean mill located about a mile from his home. We were now able to place the source of the soy bean dust to this mill. Then the patient volunteered the information that he could now account for his asthma being worse when there was a south or southwest wind, which would blow the soy bean dust to his home. In fact, whenever he smelled soy bean odor, he always had asthma.

On one occasion, as a clinical test, a small amount of soy bean powder was blown close to his face. In two or three minutes he developed severe asthma which required a hypodermic injection of adrenalin.

Treatment would have been simple except for the fact that the patient refused to move from his present location. For this reason it was decided to attempt desensitization. Injections were begun with .05 cc. of a 1:100,000 dilution and were cautiously increased. On a few occasions he developed mild asthmatic attacks a short while after the injection. He was given 15 injections at which time he was able to tolerate one cubic centimeter of 1-100,000 dilution. This treatment appeared to increase his tolerance to the soy bean dust, but he was not entirely free from symptoms. Because of the slow progress the patient decided to discontinue treatment and move. As yet, he has not moved, but it will be of great interest to see if his asthma entirely disappears when he moves far enough away from the soy bean mill.

COMMENT

Olsen and Prickman[2] state that hypersensitiveness to soy beans should be sought particularly among three groups of allergic individuals: (1) those employed in the handling of soy beans and in the manufacture of soy bean products; (2) those who, because of diabetes or obesity, are using soy beans as wheat substitutes in their diet and (3) those allergic children who are fed soy bean products as substitutes for wheat and milk to which they have been found sensitive. A fourth group may be added, namely, those allergic individuals who live in the vicinity of soy bean mills and develop endemic asthma due to the inhalation of air borne soy bean dust.

Further investigation may show that other individuals in the vicinity of this mill, or other soy bean mills throughout the country may have asthma of the endemic type due to air borne soy bean dust.

SUMMARY

A case of endemic asthma due to soy bean dust is reported. This individual has frequent attacks of asthma while at home but never while at work or away from the city. He gives a strongly positive reaction to soy beans by the scratch method, and when a small amount of soy bean dust was blown close to his face he developed a severe attack of asthma. His asthma is brought on especially when there is a southwest wind which blows the soy bean dust to his home from the soy bean mill, located a little over a mile from his home.

Gary State Bank Bldg.

ABSTRACT

SULFATHIAZOLE PRODUCES THE RECOVERY OF TWO PATIENTS WITH SEPTICEMIA

The recovery of two patients from septicemia was brought about by treatment with sulfathiazole, a new sulfanilamide derivative, W. Calhoun Stirling, M.D., Washington, D.C., reports in *The Journal of the American Medical Association* for July 13.

He also used sulfathiazole with success in twenty-five other cases of urinary infections. Many of these infections had not responded to sulfanilamide treatment.

In the author's opinion sulfathiazole seems less toxic and more effective than other members of the sulfonamide group, nausea being the only side effect seen, and this subsides quickly when the drug is discontinued.

"In sulfanilamide-resistant infections," he says, "sulfathiazole offers a new avenue of attack which in the few cases in which it has been used seems to justify the claims made for it."

Sulfathiazole is absorbed and eliminated quickly but this is obviated by giving it more often than other sulfanilamide compounds are given.

HEMORRHAGE DURING PREGNANCY

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Hemorrhage, toxemia, and infection are the three major causes of maternal mortality in the United States. Excessive hemorrhage was reported in twenty-five per cent of the maternal deaths occurring in Indiana during 1939 according to the report of the Committee for the Study of Maternal and Fetal Mortality of the Indiana State Medical Association.[1]

Hemorrhage which appears during the course of pregnancy contributes materially to this group of fatal cases. The cause of such antepartum bleeding may be listed as follows:

I. Disturbances of Pregnancy
 1. Early in Pregnancy
 a. Abortion
 b. Extra-uterine gestation
 c. Hydatidiform mole and chorioepithelioma
 2. Late in Pregnancy
 a. Placenta previa
 b. Abruptio placentae
 c. Premature labor

II. Not Directly Related to Pregnancy
 1. Throughout Pregnancy
 a. Cervical erosions and polypi
 b. Varices in lower genital tract
 c. Carcinoma of cervix

Placenta previa and abruptio placentae are responsible for the hemorrhage in over fifty per cent of the maternal deaths due to blood loss. They are also the background for almost all of the hemorrhages which occur during the last trimester of pregnancy. Early diagnosis and adequate management of these cases will result in a material reduction in maternal mortality.

PLACENTA PREVIA

The attachment of the placenta in the lower uterine segment with the consequent formation of placenta previa occurs once in approximately 150 pregnancies. Recent studies[2] indicate that it appears with equal frequency in primipara and multipara. Its development is probably due to some interference with the transportation and implantation of the ovum.

The attachment of the placenta to the portion of the uterus which forms the lower uterine segment inevitably results in bleeding. This occurs because the uterine wall retracts and the internal cervical os is gradually effaced during the latter part of pregnancy, and the uterine wall is pulled away from the margin of the placenta. The more the placenta overlies the internal cervical os, the earlier in pregnancy the initial hemorrhage usually appears.

Placenta previa may be classed as *complete* when the cervical os is entirely covered by placental tissue.[3] It is only when the center of the placenta is over the internal os that we accurately describe it as a *central* type, and this is rarely found. When placental tissue encroaches upon or partially covers the internal cervical os, it is an *incomplete* placenta previa. This form is most frequently encountered. It may be further subdivided into *partial* when a portion of the os is covered, *marginal* when the edge of the placenta reaches the internal os but does not overlap the edge of it, and *lateral* when there is a low implantation of the placenta without the margin of the placenta actually reaching the internal os.

The initial hemorrhage is usually minor in amount, often only an ounce or two, and ceases spontaneously. It is characteristically painless and without apparent cause. As further separation of the placenta takes place, bleeding recurs. Subsequent hemorrhage is often more profuse and at any moment an exsanguinating blood loss may occur without warning.

Every patient who has any bleeding during the last trimester of pregnancy should be considered a patient with placenta previa until proved otherwise.

Careful vaginal examination is the only way that the diagnosis can be accurately made.[4] Such an examination carries with it a risk of increasing the bleeding and the potentiality of introducing infection. Consequently, it should be performed only under suitable circumstances and with adequate preparation. The first step in the reduction of morbidity and mortality associated with placenta previa is dependent upon an early diagnosis reached in such a way that an adequate plan of management may be safely followed. This can be most satisfactorily accomplished by the adoption of a routine plan of investigation embodying the following generally accepted principles:

1. Hospitalization of every patient who has any bleeding during the last three months of pregnancy. This rule should be followed even though the bleeding is minor in amount and has ceased spontaneously.

2. No preliminary examination, no rectal examinations at all, and no vaginal examination until preparations have been completed as outlined below.

3. No vaginal packing.

4. Preparation for transfusion so that a blood

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[1] Hawk, J. H. *Jour. Ind. St. Med. Assoc.* **33**:301, 1940.

[2] Davis, M. E. *Int. Abst. of Surg.* **68**:504, 1939.

[3] Adair, F. L. *Obstetrics and Gynecology*, Vol. I, Chapter XXXV. Lea and Febiger, Philadelphia, 1940.

[4] Davis, M. E. *Surg. Clinics of North America.* **15**:737, 1935.

donor who has been typed and whose blood has been cross-matched with the patient's blood is immediately available.

5. Provision for control of bleeding by some means of mechanical induction of labor or cesarean section.

6. Sterile vaginal examination which should be performed in the delivery room after complete preparation of the patient and with the best aseptic technique. At this time the diagnosis of placenta previa is confirmed or ruled out, if necessary, by insertion of the finger into the cervical canal to reach the area around the margin of the internal cervical os. If the placenta is not felt, a sterile speculum examination should be done to expose the cervix and discover any local cause for the bleeding. Davis reports that at the Chicago Lying-in Hospital approximately 40 per cent of patients with bleeding in the last trimester of pregnancy have placenta previa.

7. If the diagnosis of placenta previa is confirmed, termination of the pregnancy is indicated.

The active treatment of placenta previa requires careful individualization to determine the safest procedure for each patient. The severity of the placenta previa, the general condition of the patient, the duration of the pregnancy, the parity and age of the patient, and the state of the cervix must all be considered. Methods to be considered are:

(1) Rupture of the membranes.
(2) Insertion of a hydrostatic bag.
(3) Willett's forceps.
(4) Braxton-Hicks version.
(5) Cesarean section.

Such procedures as manual dilation of the cervix, forced extraction, and vaginal cesarean section are obsolete and definitely contraindicated because of the increased risk which they entail and the poor results which they give. Vaginal packing is also unsatisfactory because it will not control the hemorrhage, and increases the danger of infection. Even as a temporary procedure, it is contraindicated.

Rupture of the Membranes is the simplest of the procedures available and is the procedure of choice in selected cases. It initiates labor and, with the release of the amniotic fluid, allows the presenting part to fit firmly into the lower uterine segment and compress the margin of the placenta against the uterine wall. In this way bleeding is satisfactorily controlled during the stages of dilatation and expulsion. It is usually effective management in marginal and lateral placenta previa if the cervix is soft and shortened. This is particularly true in the multipara near term or in the primipara early in labor. If rupture of the membranes alone proves ineffective, a bag may be inserted or Willett's forceps used.

Insertion of a Bag into the lower uterine segment is a positive method of obtaining tamponade at the site of placental separation. The bag must be inserted through an opening in the membrane sac so that it lies above the level of the placenta. Traction exerted on the bag, usually by means of a one pound weight hung over the end of the bed, stimulates uterine contractions and controls the bleeding during cervical dilatation. There is danger of unrecognized hemorrhage as the bag slips through the cervix and occludes the vagina. This occurs unless the fetus follows closely behind the bag. Consequently the progress of labor should be very closely watched and the bag immediately removed when it reaches the vagina. A bag of sufficient diameter to produce complete cervical dilatation should be used. The insertion of the bag carries with it a greater risk of introducing infection than rupture of the membranes alone. This procedure is often satisfactory in the primipara near term with a marginal or lateral placenta previa for whom rupture of the membranes is not effective. It may also be used for the multipara near term with a short, soft cervix, and a partial placenta previa.

Willett's Forceps are long volsellum-like forceps designed to grasp firmly the fetal scalp. The membranes are ruptured and, under the guidance of the examining finger, the scalp is grasped. An ordinary volsellum forceps may be substituted. Traction is exerted upon the forceps so that the fetal head is used to tamponade the placenta firmly. The use of this instrument has the advantage of simplicity and ease of application. It is associated with less risk of infection than the insertion of a bag. There is an increased risk of damage to the fetus. For this reason its use is often limited to those cases in which the baby is dead or previable. It is a method, however, which should not be lightly dismissed. The applicability of the Willett's forceps is somewhat greater than that of the bag.

Braxton-Hicks Version is employed much less frequently in the management of placenta previa than it was some years ago.[5] It is technically difficult to perform a version through the cervix which admits only two fingers and it is associated with the danger of damage to the maternal soft tissues. There may be increased bleeding during the manipulation although the hemorrhage is satisfactorily controlled as soon as the foot is brought through the cervix and the hip and buttocks of the infant used as a tamponade. The high fetal mortality associated with this method usually limits its use to situations in which the fetus is dead or previable.

Cesarean Section has been employed with increasing frequency in the management of placenta previa. This trend in management has undoubtedly been in part responsible for the more favorable results of recent years. Cesarean should not be considered the procedure of choice in all cases of placenta previa. It is associated with a higher maternal mortality than rupture of the membranes or the use of Willett's forceps.[6] It usually condemns the patient to cesarean section for all future

[5] Findley, D. *Am. Jour. Obs. and Gyn.* **36**:267, 1938.
[6] Davis, M. E. *Am. Jour. Obs. and Gyn.* **32**:518, 1936.

deliveries and in that way adds to the risk. It should not be performed upon the patient with ante partum bleeding unless the diagnosis of placenta previa has been confirmed by vaginal examination. Where indicated it should be done immediately following the vaginal examination with no latent period for the ascension of infection. Cesarean section is the procedure of choice in the presence of a complete placenta previa. It is usually indicated for the patient with a partial placenta previa particularly when the cervix is long and firm. The favorable fetal prognosis in comparison with that of the other methods described usually justifies its selection for the delivery of the premature baby. Cesarean should not be looked upon as a guaranty of a live baby as in most series of patients with placenta previa delivered by cesarean section the fetal mortality ranges from 10 to 15 per cent. Collected statistics indicate that the low cervical cesarean section is preferable to the classical type. This is true because of its greater freedom from post-operative complications and the lowered incidence of infection. In the frankly infected patient, any cesarean other than the Porro operation is contraindicated and usually delivery through the vagina is preferable.

Regardless of the method of delivery, provision must be made for supportive treatment.[7] The blood volume can be temporarily restored with hypertonic glucose solutions intravenously. Not more than 600 cc. of 20 per cent glucose solution, given slowly, should be used unless followed by a liberal blood transfusion. If blood is not immediately available, 500 to 1,000 cc. of 6 per cent acacia solution may be given intravenously. Subcutaneous administration of Ringer's or saline solution may help to restore tissue fluids. These are all to be looked upon as temporary expedients and should be followed by the transfusion of adequate amounts of whole blood. Pastore has shown the importance of early transfusion as an adjunct in the protection of the patient from infection.[8] Where the blood loss has been great, transfusion must be given before the delivery is undertaken.

The location of the placental site in the passive lower uterine segment increases the frequency of postpartum hemorrhage.[9] Careful conduct of the third stage of labor is important. Preparations should be made for packing of the uterus and upper vagina if bleeding is not controlled after delivery of the placenta. Manual removal of the placenta may be necessary. The presence of the large uterine sinuses of the placental site immediately above the cervical os predisposes the patient to infection so that intravaginal manipulation should be kept at a minimum and the technique should be carefully watched.

[7] Dieckmann, W. J., and Daily, E. F. *Am. Jour. Obs. and Gyn.* **30**:1, 1935.

[8] Pastore, J. B. *Am. Jour. Obs. and Gyn.* **32**:859, 1936.

[9] DeLee, J. B. Principles and Practice of Obstetrics, Chapter XXXIV. W. B. Saunders Co., Philadelphia, 1936.

No patient with a placenta previa should leave the hospital undelivered. The physician should be in constant attendance throughout the labor of every patient with a placenta previa.

ABRUPTIO PLACENTAE

In this condition the placenta is situated in a normal location but becomes pathologically detached. Such premature separation of the placenta is associated with evidence of toxemia of pregnancy in approximately sixty to seventy per cent of the cases. There is rarely a history of trauma. It occurs approximately once in every 250 deliveries but the majority of such instances are of mild degree. Severe separation is encountered once in every 750 to 1,000 deliveries.

If the placenta is entirely separated from the uterine wall the situation is described as a *complete* abruptio placentae. The fetus is always dead and there is extensive intra-uterine hemorrhage. In some instances there is marked infiltration of blood into the uterine wall and the surrounding organs. This is classified as *utero-placental apoplexy* or the Couvelaire uterus and is to be looked upon as the most severe form. Where partial separation of the placenta occurs it is described as *incomplete* abruptio placentae.

The incomplete variety usually appears late in the course of labor. It is characterized by a change in the character of the labor with increased uterine contractions and an increase in pain. There usually is a moderate bloody discharge without excessive hemorrhage. If sufficient placenta becomes separated, a change in the fetal heart tones may be manifested and, as the process continues, asphyxiation of the fetus results. Usually the labor is terminated before complete separation. This result may be hastened by rupture of the membranes. Forceps application or version and extraction are indicated if the cervix is completely dilated and conditions are suitable. The greatest danger in this group of patients is from postpartum hemorrhage. Provision for the control of bleeding and replacement of the blood volume should be made at the first evidence of premature placental separation.

Complete abruptio placentae is usually encountered before the onset of labor. It occurs without warning and is progressive until the uterus is emptied and the bleeding can be controlled. It begins with the formation of a retroplacental hematoma which gradually increases in size and is associated with increasing separation of the placenta. The hemorrhage is entirely intra-uterine at the onset and may remain concealed until massive blood loss has occurred. Eventually there is external bleeding but often not of great amount. Varying degrees of infiltration of blood into the uterine wall are encountered.

Clinically, severe placental abruption is accompanied by the development of sudden abdominal

[10] Miller, N. F. *Northwest Medicine.* **36**:422, 1937.

pain.[10] The uterus becomes tender on palpation, at first perhaps localized to the placental site but gradually involving the entire uterus. The height of the fundus increases as blood accumulates in the uterus. The uterus becomes firmer in consistency. With the onset of these clinical symptoms there is increased activity of the fetus and a rapid or irregular fetal heart rate. With complete separation of the placenta, the fetal movements cease and the heart tones are no longer heard. The clinical evidence of blood loss and shock are characteristically out of proportion to the amount of external bleeding. The patient may, in fact, appear almost exsanguinated without external bleeding. The clinical picture is entirely different from that of the patient with placenta previa.

There is no way that the hemorrhage from the placental site can be controlled until the uterus is emptied and can contract sufficiently to close the maternal blood sinuses. With the patient not in labor and the cervix rigid and unprepared, delivery through the vagina is a tedious process. Under these circumstances the procedure of choice is usually cesarean section.[11] This method of approach has the further advantage that the ability of the uterus to contract after delivery of the fetus and placenta may be observed. Where there is extensive infiltration of the uterine muscle with blood, failure of uterine contraction, and continued bleeding, hysterectomy may be performed without delay. Excessive postpartum hemorrhage in a patient already suffering from severe blood loss in that way may be prevented.

Treatment of the general condition of the patient is of the greatest importance. Any plan of therapy which does not take this into consideration is doomed to failure. Massive blood transfusions before and during the delivery often determine the difference between a successful outcome and the death of the patient. As much as 2,000 or 2,500 cc. of blood may be necessary in these severely exsanguinated patients. Intravenous fluids can not substitute for actual blood transfusions. At best the maternal mortality is high. The fetal mortality approaches 100 per cent. Complete abruptio placentae is one of the most formidable complications in obstetrics. Its adequate management requires the immediate mobilization of the resources of modern medical practice.

SUMMARY

1. Hemorrhage during the last trimester of pregnancy is a potentially serious obstetrical complication.

2. Immediate hospitalization is indicated even where bleeding is minor in amount or where it may have ceased spontaneously.

3. Every patient with painless bleeding during this period of pregnancy should be considered to have a placenta previa until proved otherwise.

4. A routine plan of investigation such as outlined will result in accurate diagnosis with the greatest safety for the patient.

5. No patient with a placenta previa should leave the hospital undelivered.

6. The method chosen for delivery depends on a consideration of the degree of placenta previa, the general condition of the patient, the duration of pregnancy, and the age and parity of the patient.

7. Abruptio placentae is characterized by the sudden onset of pain, increasing size and tenderness of the uterus, shock, and absence of fetal heart tones, and vaginal bleeding.

8. Control of hemorrhage in abruptio placentae can not be accomplished until the uterus is emptied.

9. Adequate provision for readily available, properly matched blood for transfusion is essential in the management of both placenta previa and abruptio placentae.

10. Postpartum hemorrhage is frequently encountered and forms a dangerous complication of placenta previa and abruptio placentae.

11. Special care must be exercised to guard against the introduction of infection during the management of both of these conditions.

[11] Smith, P. H. *Am. Jour. Obs. and Gyn.* **30**:62, 1935.

ABSTRACT

SUGGEST IMPROVEMENTS IN PROCEDURE FOR TETANUS IMMUNIZATION

Constructive suggestions to increase the usefulness of injections of toxoid for immunization against tetanus or lockjaw and yet guard against the difficulties involved in its use are offered by Robert A. Cooke, M.D., Stanley Hampton, M.D., William B. Sherman, M.D., and Arthur Stull, Ph.D., New York, in *The Journal of the American Medical Association* for May 11.

The authors say that the object of their paper is to acquaint the medical profession with the fact that sensitivity can be induced as the result of the present procedures of active immunization to tetanus. "We believe that this occurs more often than present reports indicate," they say, adding, however, that it is not their purpose to decry the use of this important treatment procedure.

The procedure they recommend is as follows: "A scratch test should always be made before the second injection (after which a reaction is most likely to occur) and any later injection of the toxoid preparations, and for purposes of record and comparison it should be done before a first injection. This test is preferably made on the anterior surface of the forearm. If there is no urticarial wheal and skin redness, the required injection may be made, but always with the following precautions:

"If there is a very active wheal and redness, prudence dictates that the injection should be postponed and the test repeated in from four to six months. If the wheal is slight or moderate one may proceed by giving the required amount of the toxoid in divided doses. If no general reaction occurs in twenty minutes one may also proceed gradually and cautiously until the required dose has been given.

"Under all circumstances, with any dose, the patient must be kept under observation for at least one-half hour, for any reaction of serious import will begin within this time.

"If there is any evidence of general reaction such as itching palms, general body itching, redness or hive-like eruptions, cough or a sense of pressure in the chest, the tourniquet should be tightly applied above the injection site and epinephrine administered and the procedure repeated as indicated. It is better to give the toxoid injection in the arm, as the tourniquet may be applied more effectively."

NASAL SURGERY, THE INTERNIST, AND THE PATIENT

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The justification for this paper may be found in the hope that it may be possible to explain away some of the difficulties that have arisen between the rhinologist and those with whom he has or should have professional contact. There has, unfortunately, been built up in the minds of some patients and physicians alike a fear of, or at least a lack of faith in the work of the specialist in nasal disease. This has been true because occasionally some one submitted to surgery who did not feel repaid for his trouble.

The sinuses were beyond effective study or therapeutic approach until the discovery of cocaine in 1887. Our specialty has advanced to its present state, as has medical knowledge in general, by the slow process of trial and error. For many years this progress was made more difficult by the activity of some men without adequate training and without a reasonable knowledge of the truths which were, at that time, available. Fortunately, the men who represent our specialty at present are much better qualified. The individual who seeks help for a nasal problem may now, in most cases, be confident of a satisfactory outcome.

Sinus disease is responsible for the great proportion of patients who seek our help. Many of these cases are acute or subacute associated with the common cold, and get well with a reasonable application of accepted methods. Surgery is rarely necessary here and, when it is done, confines itself to the simplest type of drainage operation possible. A cure almost invariably results unless a virulent organism finds harbor in a mechanically bad nose and remains as a chronic infection.

The individual with the chronic or recurring nasal complaint is a very different problem, and one which requires all our diligence and interest. Chronic sinusitis represents an unfavorable balance between the local mechanics on the one hand and the resistive forces of the body on the other. Both of these factors must be properly evaluated for a satisfactory termination.

In rank of importance we may place the allergies at the head of the list of those systemic states responsible for an ill-functioning nose.[1] Failure to recognize its presence has accounted for many disappointments and we are much more alert for its recognition than formerly. True and uncomplicated vasomotor rhinitis has long been easily recognized as a characteristic entity. It is rather the case of mixed allergy and infection which deserves our utmost caution in approach, as clinically they may more nearly resemble infection than allergy. I will not forget a woman on whom I had done what was considered a very acceptable ethmoidectomy and who was considerably benefitted, but who

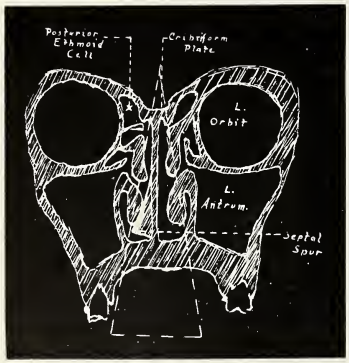


Figure 1. Frontal section of a normally functioning nose. The spur represents one of the several types of septal deformity which needs no correction. To do so will not improve the function of this nose and the patient will not be grateful for it. This patient could never develop ethmoid or frontal sinus disease when his osteum is as free as shown. Any impaired function on the right side would be apt to be due to maxillary or sphenoid sinusitis. This must be recognized to avoid the pitfall of correcting an obvious blockade (spur) without correcting the real trouble. **It is swelling from inflammation that disturbs** a patient—not a mechanical blockade without inflammation.

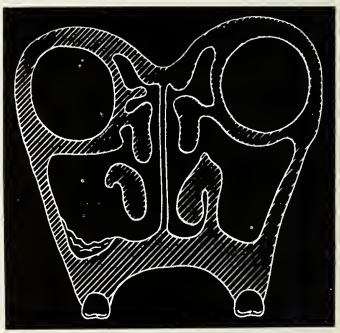


Figure 2. Submucous resection (somewhat more complete than necessary) with spur corrected to provide access to right maxillary. An adequate window here corrects its difficulties in the great majority of cases (97% of 1,635 cases—Hempstead[2]). Window resection when correctly done now (to the floor) need rarely be repeated, whereas formerly it was a major cause of repeat surgery. Let us not forget that a good proportion of chronic non-tuberculous cough comes from antrum infection.[5]

continued to have occasional and unaccountable periods of activity. She made her own diagnosis by volunteering the information that she got worse every time she milked a cow! Another was aggravated by exposure to gasoline fumes. These combined cases usually require medical care for the hypersensitive state and surgical attention to the infective element—both are necessary for good results.

We must constantly keep an open mind for the recognition of other systemic states which serve to activate or create symptoms in the nose. There are many individuals who have sinus headaches until a bad gall bladder is removed or treated, or until a food allergy or an ovarian dysfunction is corrected. There are others whose nasal activity persists until an irritable colon, chronic appendicitis, or pelvic pathology is cared for adequately. Fatigue factors and unhealthy living habits, faulty diet, or vitamin deficiency must be considered as disturbing factors. *A carefully taken history* is a most important aid in helping us to determine the responsibility for illness.

In any chronic nasal disturbance there are obviously factors which are more or less persistently operative. If these factors are not wholly or partly due to some general state, then we must blame the local mechanism. In the great majority, it is found that bad mechanics are responsible. If the local condition or the general reaction is not bad, treatment will suffice; however, if the complaint is serious enough to justify it, some surgical correction is often necessary.

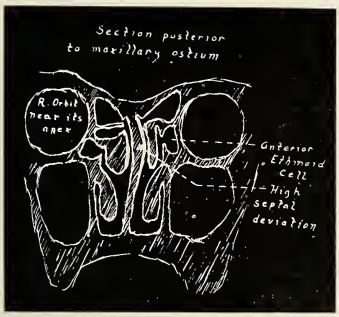


Figure 3. Pathology in the upper portion of the nose is very frequent because of the narrowness of that region and the comparative frequency of blockade of the sinus areas here. Hence ethmoids which open here are a most frequent cause of trouble. It is a very fortunate individual who, given a severe blockade of the upper posterior one-fourth of his nose, will not sooner or later develop a chronic infection here. Whether or not this serves as a focus of infection for some remote disease depends on the type of organism and resistance to it—in other words how toxic it is for him. It may only be a local trouble maker responsible for post-nasal drip, prolonged or frequent colds, stuffy nose, chronic cough,[7] (or "laughing catarrh" as one humorist called it), eye disorders, head and neck ache, or chronic progressive deafness.

It is not difficult to produce a good nose and a good sinus in the vast majority of cases. Results are in direct proportion to the skill, experience, and interest of the operator. The responsibility is distinctly ours.

We may divide the sinuses into the lower group (represented by the maxillary), and the upper group (represented by the remainder, especially the ethmoid). They should be separated because pathology in the upper sinuses seems to be largely produced by nasal blockade, while that of the antrum is not. Its osteum or canal, of course, may be swollen and partially blocked. Antrum difficulties seem to arise more from an infected tooth root (2.22% of 385 cases—Hempstead)[2] or secondarily infected from diseased upper sinuses, or following severe inflammatory injury to the antrum cilia. If the cilia are not active the antrum is unable to empty itself because of its superiorly placed osteum.

As in any other field, there are slight differences of opinion as to just what technique and procedure to employ in certain conditions. It is agreed that the desirable thing is to produce a mechanically good nose. Inspired air must pass upward to the cribriform plate and must have free access to each sinus and its lining membrane (it is a most uncomfortable head in which this is not the case) and to allow any pus which lies within to get out. It is agreed that as conservative a procedure as will produce the desired result should be done and that normal tissue should not be sacrificed unnecessarily. On the other hand *we do the patient and our specialty no good if we require several operations to do what could and should be done at one sitting.* There will be less misunderstanding if we explain that a very conservative type of operation simply

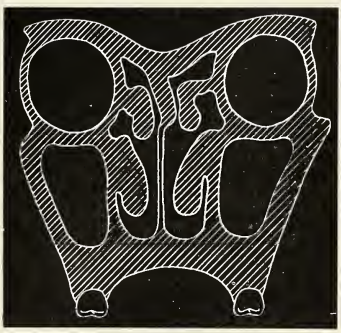


Figure 4. Represents a submucous operation unskillfully done. Fortunately these are much less common than formerly. The owner of this nose would constitute one of the dissatisfied group as from his standpoint he has had an operation, and from our standpoint he has not had any. The upper nose must be made to simulate that of Figure 1 through some sort of manipulation. Correct, clean surgery applied to this region is the most gratifying work we do.[5,6] Properly performed intranasal ethmoidectomy produces brilliant permanent results.

makes conditions favorable for the patient to recover from sinusitis, that the infected tissue is still present, and that it may require as much as three years thereafter for the patient to get well.

It seems reasonable to state that the more advanced the process, the more thorough will the type of operation have to be. An ultra conservative surgical approach will be insufficient to improve more than temporarily a case of polypoid pansinusitis with pus formation. *Unless thorough clean surgery is done here the patient is very apt to consider our work as tinkering and unsuccessful. That very well describes any surgery short of the kind that will get him well. Properly approached, brilliant and permanent results may be had here.*

The frontal sinus is fortunately not often diseased. In those rare cases in which it is, with mucous membrane change and troublesome enough to demand interference, the external type of fronto-ethmoid operation is indicated. There is no deformity following this and the result is almost invariably good. Several points may be illustrated by the recitation of such a case. A young farmer was operated upon because, in addition to local discomfort such as nasal obstruction and discharge, he was tired, nervous and sick and had been for years. Because he had a severe suppurative pansinusitis, his septum was straightened and a handful of polypoid tissue with pus was removed from his left antrum, and the left middle turbinate was removed. He was told that it was quite possible that he might need more surgery, as his left ethmoid and frontal were involved. He improved somewhat but later an external left fronto-ethmoid operation was performed. Since that time he has gained twenty-five pounds and has recovered practically all his old vigor. The scar can be seen only on close scrutiny, and no further surgery can be necessary.

This illustrates: (1) That repeat surgery is accepted by the patient if he is told of its probability and is satisfied that his condition justifies it; (2) That radical approach is sometimes necessary to get the rotten spot out of the apple; (3) That the upper sinuses (particularly the ethmoid) cause much more systemic damage than the antrum as a rule[3] and that disease here can be completely eradicated[7]; and (4) That it would have been a tragic thing for this boy if he had been told to let it go, that every one in Indiana has catarrh and that he was nervous which, as a matter of fact, he was.

Nasal and sinus surgery in children is rarely necessary. They usually respond to local treatment associated with general care. When surgery is needed for chronic difficulties, it is usually limited to an antral window.

SUMMARY

1. Great advances have been made in the specialty of otorhinolaryngology in the last thirty years. Much fewer mistakes follow our better understanding.

2. Sinusitis is responsible for most of the illness we are called upon to see. Acute sinusitis usually responds to simple measures. Chronic sinusitis can be satisfactorily cleared up in the great majority of cases. Some form of surgery is often necessary, however, and in good hands should be looked upon with confidence.

3. Good surgical results depend upon:
 a. Careful diagnostic methods to discover every sinus or sinus group involved.
 b. Proper evaluation, as nearly as may be, of its dependence upon or cause of systemic disease.
 c. Mature surgical judgment in choice of operation.
 d. Meticulous care in its performance with adequate attention to every infected area and the production of a nose that will never harbor infection again.

4. The precaution of operating upon only those conditions and in such a manner that the patient will afterward be glad he had it done. This attitude produces results at least comparable to those of any specialty.

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ABSTRACT

SYNTHETIC FEMALE SEX HORMONE

Twenty-five girls, ranging in age from 20 months to 12 years, were successfully treated for a gonorrheal infection by the administration by mouth of a synthetic female hormone called diethylstilbestrol, Joseph D. Russ, M.D., and Conrad G. Collins, M.D., New Orleans, report in *The Journal of the American Medical Association* for June 22.

The condition is generally the result of accidental infection from contaminated materials and is common in young girls, especially under the age of 7 years. Its treatment has always been difficult.

In the cases reported by the New Orleans physicians negative smears were obtained in from seven to eighteen days. The substance was crushed and administered in two ounces of milk. The two physicians say that: "The rapidity of cure, the absence of any toxic or deleterious effects and the ease of administration as regards both the family and the physician lead us to believe that it is an ideal drug for the treatment of this condition." They also point out that it is an economical method of treatment.

CALCIFICATION OF PERICARDIUM

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J. D. McDONALD, M.D.
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The clinical diagnosis of calcification of the pericardium presents some difficulty, even though it is a common finding at autopsy. It generally occurs in the older age groups. A review of the literature credits Dionis[1] with describing the condition of pericardial calcification in 1705. Morgagni[2] published a case report in 1762. In 1768 Bordenave[3] reported a patient, aged 50 years, who had an inch of calcification. Simmons and Watson[4] presented an illustration of a case in 1783. In 1809 Burns[5] for the first time reported a patient with a heart ". . . diseased with specks of bone . . ." In 1849 Rokitansky, according to Leaman and Vastine,[6] reported a case where calcium granules were deposited between the necrotic muscle fibers. In 1910 Schwartz, according to the same authors,[6] made a diagnosis of pericardial calcification for the first time during the life of a patient. Turner[7] in 1924 reported 89 cases in the literature and added three of his own. Smith and Willius[8] in 1932 reported 15 cases which were diagnosed during life and verified at autopsy. In this series the youngest patient was 24 years of age and the oldest was 84 years old. Recently Leaman and Vastine[6] reported a case, aged 9½ years. In 1939 Heuer and Stewart[9] gave a comprehensive discussion of the subject of chronic obstructive pericarditis. They reported 143 patients in whom the pericardium had been resected for chronic constrictive pericarditis. The following case of pericardial calcification was a patient 12 years of age.

REPORT OF CASE

G. H., aged 12, was first seen by one of the authors (McDonald) in January, 1938, complaining of cough, expectoration and shortness of breath, over a period of five days.

Past Medical History: Negative for rheumatic infection. History of measles, mumps, pertussis and pneumonia. No injuries or operations.

Social History: Birth normal. No complications. No cyanosis at birth. Attended school until last illness.

Family History: Mother and father living and well. One brother living and well. No history of tuberculosis, diabetes, or rheumatic infection in family.

Physical Examination: Examination at this time revealed eyes, ears, nose and throat negative. Undulation was equal. Dullness existed in left chest, lower half. Bronchial breathing was audible over the same area. Heart sounds were distant. Pulse was regular, rapid and weak. Abdomen was distended and tympanitic over entire area. Extremities were negative. No cyanosis was present.

Diagnosis: Pneumonia.

Course: Expectoration gradually disappeared, cough diminished and temperature became normal on the eighth day. Heart remained rapid and pulse weak. Patient was not seen for five days, at end of which time the abdomen was enlarged, but not tympanitic. There was a fluid wave and apparently the abdominal distention was due to ascites. Heart sounds were normal, but weak, and a faint friction rub could be heard about the third interspace, near the sternum, on the left side. Bases of the lungs were dull to percussion. Patient ran a normal temperature in the morning and up to 100° in the afternoon. Patient was given digitalis and theobromine. The abdominal distention continued to increase. Salyrgan was administered, which improved the patient's condition. About 900 cubic centimeters of urine were excreted in twenty-four hours following an injection of salyrgan. The liver became markedly enlarged, its border extending downward to the crest of the ileum. Blood vessels in the neck were engorged. Blood pressure was 90/50. It was necessary to use salyrgan intravenously twice weekly to keep the patient comfortable. Each time salyrgan was discontinued pleural effusion developed and ascites increased. Liver returned to almost normal size following treatment with salyrgan and ammonium chloride. After several weeks of such treatment, paracentesis was necessary. From four to six quarts of straw colored fluid were removed at intervals of three to four weeks.

X-ray examination (May 16, 1938) was made as soon as the patient could be moved. Roentgenogram of the chest revealed a definite calcified ring

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around a portion of the heart. The liver was enlarged and there was a small amount of fluid in the pleural cavity. Mercurin suppositories were substituted for intravenous salyrgan. The patient was kept in bed most of the time. Pulse ranged from 100 to 110. A diagnosis of calcified, constrictive pericarditis was made. A second x-ray (March 22, 1939) revealed dense calcification of the pericardium. The patient's family was advised, after x-ray in May, 1938, to have the calcified pericardium excised, but at this time refused such operative treatment. The patient's condition grew progressively worse and on September 24, 1939, was admitted to the hospital. Roentgenogram revealed the same findings as the x-ray taken in March, 1939. Fluoroscopic examination gave little information. An electrocardiogram was made on September 25, 1939. The findings were negative.

Hospital Report: Present Illness: Patient states that he has had five paracenteses performed during the past three months. Patient has been taking "brown tablets" three times daily for 1½ years, and a "shot in the arm" once each week until two months ago, when suppositories were substituted. According to the patient, he has had no symptoms such as cardiac pain, or palpitation. He complained of "getting out of breath" easily and of cramps in the legs. No gastro-intestinal or genito-urinary complaints were present.

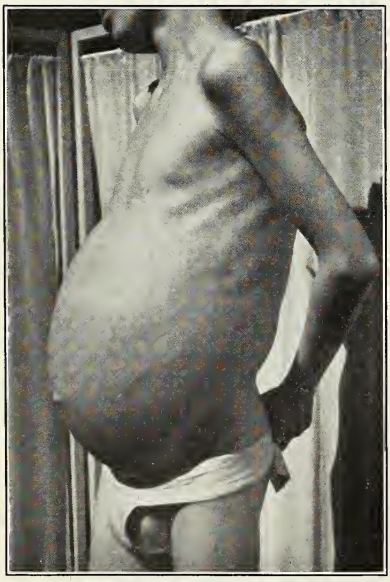


Fig. 1. Infra-red photograph showing superficial venous network, distended abdomen and swollen scrotum.

Physical Examination: Physical examination reveals a young white male, lying in bed, rational and capable of answering questions. Patient has a brassy cough at intervals. External jugular vein, right, is engorged, tortuous and pulsates systolically. Abdomen is grossly distended; superficial venous network over abdomen is plainly visible (Figure I); scrotum is swollen and apparently contains fluid.

Head: Pupils regular and equal. React to light and distance. Muscle balance normal. Teeth good. Throat moderately inflamed.

Neck: Thyroid normal. Right superficial jugular vein is distended, tortuous, and pulsates.

Chest: Normal size and markings. Flares out at base because of large, distended abdomen.

Heart: Cardiac impulse was not exaggerated; no thrills present. Rate somewhat rapid, but below 100. Rhythm normal. First sound is slurred, but no definite murmur is noted. Blood pressure 117/75.

Lungs: Expansion symmetrically diminished. Fremitus increased over left lung field. Resonance impaired left upper lobe and both bases. Breath sounds all have a harsh sound. A few moist rales heard in both bases, especially the right.

Abdomen: Greatly distended. Superficial venous network is readily seen. A prominent fluid wave can be elicited. Liver margin can be palpated about 9 centimeters below the costal margin. The left lobe of the liver is palpable.

Skin: Normal.

Extremities: Normal.

Reflexes: All reflexes hypoactive and hard to elicit.

Laboratory Report:

Sputum: Negative for tubercle bacilli and fungus. Pus cells present.

Blood: W.B.C., 5,750; R.B.C., 4,200,000; Hg., 59.2 per cent.

Blood Differential: Neutrophiles, 62; small lymphocytes, 25; large lymphocytes, 3; large monocytes, 2; transitionals, 2; eosinophiles, 6; basophiles, 0.

Urine: Specific gravity, 1.028; reaction, acid; albumen, positive; sugar, negative; R.B.C., negative; pus cells, occasional; casts, none.

Abdominal Fluid: Five quarts were removed on 9-28-39.

Blood Wassermann: Negative.

Sedimentation Rate: 6 millimeters at end of one hour, by the Cutler graphic method (Am. Rev. Tuberc., 19:544 (May) 1929).

Operative Procedure:

October 3, 1939, pericardiotomy was performed. Gas-oxygen-ether anesthesia was administered. The blood pressure before operation was 117/75.

A six inch curvilinear incision, roughly in the left parasternal area, was made, wound edges retracted, subcutaneous tissues divided in the same plane, and the thoracic cage exposed. Segments approximately three inches in length of the third,

fourth, fifth and sixth ribs, including cartilaginous junctions, were removed. The pericardiomediastinal structures were exposed, after an incision had been made through the retrocostal bed, including posterior periosteum, endothoracic fascia and parietal pleura. The pleural cavity was left intact.

The parietal pericardium was observed to be pallid in color. By palpation of the heart it was determined that there was a large shelf of firm, irregular, calcified deposit, felt posteriorly and laterally on the left, encroaching on the base of the heart. The calcified shelf over the right ventricle was smooth. The apex was not involved. The parietal pericardium was not incised. Because of the obvious impossibility of removing the large calcium cuff around the heart, no further procedure was attempted. The wound was closed without drainage and the patient returned to his room in a satisfactory condition. Blood pressure postoperatively, 110/60.

Postoperative Course: Elevation of pulse from 120 to 140 was noted. Temperature ranged from 102 to 104 during the five days postoperatively. On the fifth day the patient died from cardiac failure. Wound healed by first intention.

Autopsy Summary: Clinical Diagnosis: Adhesive pericarditis (Pick's Disease). General: Body was that of a young adolescent male. Skin sallow. Abdomen distended. The thorax and upper abdomen were opened by the usual autopsy incision.

Findings: *Heart:* Appeared grossly enlarged. On palpation a hard, irregular area was noted on the posterior surface and extending upward across the anterior portion. On removal of the parietal pericardium an extensive, irregular, calcified cast was seen, formed about the heart, with the greatest thickness on the lateral and posterior aspects. In a few places the cast was fastened securely into the myocardium by spicules of calcification. Valves were normal, except the mitral, which was slightly enlarged. Coronaries were patent. *Abdomen:* A large amount of serous, straw colored fluid was present in the abdomen. *Liver:* The surface of the liver was mottled with purple and white appearing areas. Numerous rounded elevations over the liver surface were also noted, in general presenting a picture of cirrhosis. *Kidneys:* Appeared normal in size. Capsules stripped readily. *Autopsy Diagnosis:* Pick's Disease; cirrhosis of liver.

Tissue Section: Liver: Section presents a variegated appearance. In numerous places the tissue structure is separated by clear spaces, as if the tissues had been edematous. Other areas present an appearance resembling fatty degeneration. In still other areas the tissue is scarred and the cell structure has been greatly altered, not resembling the tissue at all. Heart Muscle: Section shows calcified areas running between the muscle fibers (Fig. II).

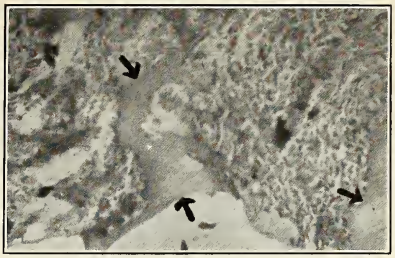


Fig. II. Microphotograph showing calcium deposits in the pericardium.

DISCUSSION

The important diagnostic points considered in this case of pericardial calcification may be summarized as follows: (1) no evident valvular lesions; (2) enlargement of the liver; (3) ascites present; (4) ascites of the abdomen and scrotum, without edema of the legs, was unorthodox in this case; (5) small pleural effusion; distention of peripheral veins, especially right external jugular; (6) questionable increase in transverse diameter of the heart; heart was displaced some to the right; an opaque shadow was noted along right and left margins in the x-ray and confirmed by fluoroscopy; (7) paradoxical pulse was present; (8) the pulse volume was below normal; (9) blood pressure, right 90/65; left, the same; pulse pressure, 25; (10) point of maximal impulse of heart, fourth interspace 5 centimeters from midsternal line.

From the history the etiological factor in this case was probably pneumococcus. It is perhaps the

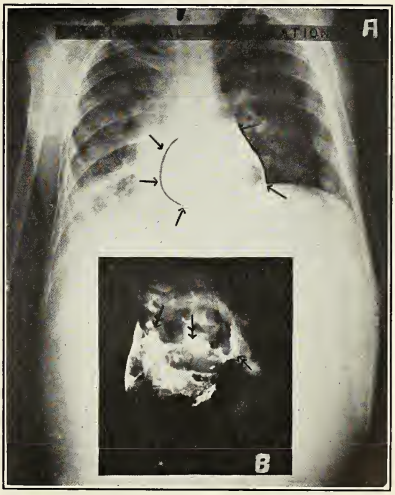


Fig. III. Showing calcified pericardial cast: (A) Portion visible in chest roentgenogram; (B) Roentgenogram of autopsy specimen.

most likely organism associated with deposits of calcium in the pericardial sac. When a mass of necrotic tissue develops, adjacent to the pericardium and cardiac muscle, it receives meager blood supply and soluble calcium salts are deposited. In comparing the x-ray of May 16, 1938, with the one of March 22, 1939, little change in the density of the calcification was noted. In this patient's initial illness the abdomen was distended on the thirteenth day because of ascites. In view of this fact, one may question the extent of such an ascites from a two weeks' illness of pneumonia and a pericardial effusion. Drainage of the effusion would, no doubt, have relieved the ascites and the engorged liver had the pericardial process been acute. On the other hand, if such an extensive calcification can form in four months' time, the initial diagnosis of pneumonia, as the primary cause of illness, was correct. If not, then some pneumonic consolidation or pleural effusion, or both, and ascites were present as a complication of an already existing pericardial calcification.

Tuberculosis has been favored as one of the most common etiological agents, though Smith and Willius[8] decided that rheumatism perhaps affected the largest number of cases. Syphilis is rarely the cause. Vitamins and parathyroid hormones have also been mentioned as agents in causing calcium. Males are more often affected than females, by a ratio of 3 to 1. Many inflammatory processes may involve the pericardium without deposition of calcium. Roentgenogram of the chest (Figure III, A) verified the presence of calcium, although it did not demonstrate the extent and character of the calcium deposit. The extent of the calcified cast is shown in the radiograph of autopsy specimen (Figure III, B).

SUMMARY

1. A case is presented of a boy, aged 12, who had an adhesive pericardium with marked calcium deposition.

2. An atypical Pick's syndrome was observed; cirrhosis of the liver was present, with ascites of abdomen and scrotum, but no edema of extremities.

3. Operative relief was demonstrated to be impossible, because of the extensive shell of calcium enveloping the heart.

ABSTRACTS

A.M.A. SEEKS IMMEDIATE RETURN OF PREPAREDNESS QUESTIONNAIRE

Committee on Medical Preparedness Asks For Cooperation of Every Physician in Promptly Sending in the Blank

"Cooperation and preparedness at this time constitutes the duty of every American citizen who enjoys his citizenship and wishes to preserve the American democracy," an announcement in the Medical Preparedness Section of *The Journal of the American Medical Association* for July 13 declares in a plea for the immediate filling in and returning to the Committee on Medical Preparedness of the Association of a questionnaire being sent to every licensed physician in the United States and in all its territories.

"This questionnaire," the announcement points out, "is being sent at the request of the Surgeon Generals of the United States Army, Navy and Public Health Service as part of the plan for preparedness of the medical profession to enable our country to meet any emergency which may arise. The questionnaire was developed with the advice and assistance of the members of the Committee on Medical Preparedness and of the Surgeon Generals. Just as soon as these questionnaires are received in the headquarters office of the American Medical Association the information supplied will be transferred to cards in a punch card system, so that it will be possible by the use of the usual machines to make a selection of physicians capable of serving in various military, naval, industrial or civil capacity.

"The physician who receives this questionnaire should take the necessary time and give the necessary thought to supply a complete and absolutely correct reply. It is the desire of the authorities, should an emergency arise, to place every individual capable of rendering aid in the position in which he can be of the utmost service, and also naturally where his training and his experience most deftly qualify him. It will be observed that opportunity is offered to state appointments in hospitals, together with the nature of the appointment, membership in special medical organizations, together with the nature of such membership, and whether or not the physician possesses the certificate of one of the examining boards in the medical specialties. There is also opportunity to provide complete information concerning the civil status of the physician concerned, whether or not he practices alone or in association with other physicians, whether or not he is married and has children, and whether or not he has any physical incapacity which might prevent him from doing certain types of service.

"It is hoped that every physician will cooperate with the Committee on Medical Preparedness and with the United States government by filling out this blank and returning it at the earliest possible moment. Obviously, as physicians are needed, an attempt will be made to supply them through this mechanism. If, however, conscription should become necessary, it is important to realize that physicians who have failed to cooperate will have to take the chance of being assigned to any kind of service which may offer, and perhaps with far less possibility of rendering the quality of aid they are capable of rendering."

SYPHILIS TRANSMITTED BY KISSING

Syphilis was transmitted to five of eleven members of a family by means of kissing, Gradie R. Rowntree, M.D., and James Robert Hendon, M.D., Louisville, Ky., report in *The Journal of the American Medical Association* for July 13. The original familial infection was from an outside source—through kissing.

The authors state that physicians should be more suspicious of all lesions which might possibly be syphilitic. Two of their patients, they say, had previously been to physicians who made a diagnosis of lip impetigo in one and trench mouth in the other. Only good fortune saved the entire family from acquiring the disease, as they are all affectionate people.

SUPERVISION OF THE NORMAL INFANT BY THE FAMILY PHYSICIAN*

HAROLD E. MILLER, M.D.
SEYMOUR

Infancy is the period during which the human body experiences its most rapid growth. The normal infant doubles its birth weight in the first six months of life and triples its birth weight before it is one year old. Never again will the individual develop so rapidly. The gain in weight is only a small part of the rapidly moving picture of development which unfolds itself in the first two years of life. The development of the skeleton and teeth, the muscular system, the nervous system, and the behavior patterns which animate this picture of development all move forward together in a coordinated sequence.

Infancy is one stage in the completion of the masterpiece of all the Creator's work. It is the stage in which the individual is most vulnerable to disease and most helpless and dependent on nurse and physician.

Any reasonable plan of infant care must include systematic observation at regular intervals by the family physician. The foundation for this work should be laid before the baby is born. Most young mothers are eager to receive information on the care of infants. The physician should lead the expectant mother to rely upon him for advice in the problems of infant care. If the physician will teach the mother that each infant is an individual human being, requiring individual care and attention, she will not seek advice in "baby books" and "doctor books." Neither will she be content to use the same formula for her baby's feeding that her neighbor used when her child was the same age.

After the infant is born and has become established on breast or bottle feeding, the family physician must examine the baby regularly at least once each month if he is to keep informed in the problems, peculiarities, and needs of each infant. During this examination the family physician should have a leisurely talk with the mother, giving her time to ask questions and to receive satisfying answers in language she can understand. Only in this way can the care of the new baby be taken out of the field of folk medicine and directed in the light of modern pediatrics. To physicians practicing in progressive urban communities this may seem superfluous. But we who are acquainted with the folks who live on the other side of the railroad tracks know that the infants and children in the poorer homes see the family doctor only when they are sick, and then many times only after all the home remedies have failed.

The average normal infant can be quickly and easily trained to take its feedings according to a set schedule. The advantages of scheduled feedings are many. A schedule that suits the needs of the infant will aid in keeping the infant contented. He will be more apt to be a "good" baby if his feedings and activities are carried on according to schedule.

The mother will also find a schedule convenient because she can plan her work to correspond to the baby's sleeping periods. This is a good point for the busy housewife to remember. She should always take time to maintain her baby's schedule because a well regulated baby is always more easily cared for than one who has no set time for anything.

A good feeding schedule brings another advantage. Most normal infants can be trained to have a bowel movement at a definite time each day when they are about two months old. After this time has become established it is a simple matter to hold the infant over a nursery vessel and train him to have his bowel movement in that position. This will eliminate to a great extent, at least, one of the unpleasant tasks of caring for a baby, the endless diaper washing. At about nine months of age most normal infants can be trained to control the bladder. This training also renders large dividends later on in preventing the habit of enuresis.

The supervision of the normal infant requires a system of keeping records of each case. Each visit to the physician's office, the condition of the baby, his weight, formula, and the instructions for his care in the coming month must be entered in the record. It is impossible to remember this data when several babies are under supervision. Each case is so much like all the others and yet different in many important respects that the busy physician cannot hope to remember all the details. This work is truly monotonous. It has none of the drama of acute disease or surgery. It is hard work and requires patience and care. The family physician may ask himself at times what good comes from his work with normal infants. But courage will be found if he will remember that this work is an important part of that increasingly successful field of medical practice, preventive medicine. Most infants are born normal and in a fairly good state of health. The goal of the family physician should be to keep them that way. If he will see to it that the infants in his practice are cared for properly, he will see serious illness among them only rarely. He must be sustained in this work by a genuine love of children and the tender young life that requires so much protection to keep it vigorous.

Unless the family physician has won the confidence of the family, of grandma and grandpa and the relatives and neighbors, he may find his advice diluted by a mass of prejudice, folk medicine and old-fashioned ideas that were the last word when grandma raised her babies. The problems of the

* Presented before the meeting of the Fourth District Medical Society at Seymour, May 8, 1940.

physician who deals with the plain people are no different here than in any other branch of the practice of medicine. Only by persuasion and sweet reasonableness can he accomplish the sometimes difficult job of obtaining parental consent for the immunization of the infants under his care. Diphtheria toxoid should be given at six months of age. And even though pertussis vaccine cannot be depended upon to prevent whooping cough, I try to give each infant the protection of this immunogen because I believe it renders pertussis less severe should the child contract the disease later. The family physician many times finds his patience taxed to the breaking point before he can accomplish so simple a thing as diphtheria immunization. But only by continuous effort can he hope to overcome the procrastination of many parents. The task of the physician who desires to immunize infants against the contagious diseases of childhood has been made more difficult by the Parent-Teachers Association in many communities. They have sponsored immunization drives in their preschool roundups. This has served to fix school age as the time for immunization in the minds of parents. There is no reason for waiting until a child is ready to attend school to give him protection against childhood disease. He needs that protection in infancy. The only way to keep this part of the practice of medicine in the doctor's office where it belongs is for every family physician to see to it that every infant is started on an immunization program at six months of age.

In summary, then, I would say that the normal infant should be examined regularly once each month in the first year of life and every two or three months in the second year of infancy. The physician should keep a complete record of the infant's weight, feeding formula and instructions for the mother. The parents should be taught to rely upon the family physician for advice in the care of their infant in preference to other abundant sources of information. The physician should immunize the infant against diphtheria and whooping cough in the second six months of life.

ABSTRACT

ORAL POLLEN TREATMENT HAS LIMITED VALUE IN HAY FEVER

The effectiveness of the oral administration of ragweed pollen extracts for the treatment of hay fever is, at the highest estimate, of a minor grade, and the method is definitely inferior to injection treatment, seven investigators conclude in a cooperative study reported in *The Journal of the American Medical Association* for July.

Because of the conflicting results of reports of oral pollen treatment in medical literature and because of the potential importance of such a method, several groups of investigators working independently in different clinics undertook in the summer of 1939 a joint project for its evaluation. These workers, who present their conclusions in the current issue of *The Journal*, are Samuel M. Feinberg, M.D., Francis L. Foran, M.D., Meyer R. Lichtenstein, M.D., Emanuel Padnos, M.D., Ben Z. Rappaport, M.D., and Michael Zeller, M.D., Chicago, and John Sheldon, M.D., Ann Arbor, Mich.

While the results of oral pollen treatment showed considerable variation, with the percentage of patients improved ranging from 100 in a small series of eleven children to 14.8 in a series of twenty-eight patients, the statistics of the three larger groups studied showed a much closer approximation. "The pooled results of all the clinics yield the fact that in 29.8 per cent of 141 cases there was an apparent improvement under oral pollen treatment," the authors state. "That this percentage is more impressive in the statistics than it was in the clinics is made apparent by the further breakdown of the figures into degrees of improvement. From these it appears that only two (1.4 per cent) of the 141 patients obtained 'excellent' results; that twelve (8.5 per cent) obtained 'good' results, and that the remaining twenty-eight (19.9 per cent) showed 'slight' to 'moderate' improvement. Moreover, it was in the relief of asthma, the touchstone of pollen treatment, that the oral treatment showed to least advantage."

In a comparative study of oral and injection treatment made at one of the clinics, only 25 per cent of those treated orally reported improvement compared with 56 per cent of those treated by injection. The results of the latter, the report says, "are somewhat less favorable than general experience with this mode of treatment but sharply superior to those of the companion oral group."

Another part of the study was a comparison of the results of oral pollen treatment with those of giving the patient pills made of starch, which could have no specific effect but might have a beneficial psychologic effect. Such a pill is called a "placebo." "The 21.9 percentage of improvement in the thirty-two cases in which placebo capsules were received," the authors say, "approximates the 29.8 per cent of improvement noted in the combined group given oral pollen. This becomes more striking in that two (.25 per cent) of the patients receiving the starch capsules reported 'excellent' relief compared with only 1.4 per cent of those treated with pollen capsules.

"The implications of these data are apparent and challenging. At the very least, the placebo report detracts substantially from the significance of the percentages of improvement with oral pollen, if it does not wholly nullify it. We have here one more example of the need of caution in interpreting results based, however necessarily, on clinical impressions in the absence of sharply defined objective criteria.

"In our appraisal of oral pollen treatment on the basis of our combined results the opinions of the investigators diverge from a complete rejection to a limited acceptance.

"We concur in the opinion that the oral ingestion of pollen is a safe procedure, that gastrointestinal reactions are frequent and troublesome, sometimes severe, but not dangerous, and that its effectiveness is, at the highest estimate, of a minor grade, particularly in the control of asthma, and definitely inferior to that obtainable by the injection beneath the skin or into the veins of pollen extract."

GALL BLADDER DISEASE*

GEORGE A. MAY, M.D.
MADISON

Gall bladder disease and diseases of the duct system extending from the hepatic cells to the small intestine are some of the most common types of chronic diseases that come into the doctor's office. Many people complain of dyspepsia, pain, and other vague symptoms which have their seat in this system. In some of the larger clinics[1] it is stated that at least 50 per cent of the patients that come to the clinics complain of indigestion, and of this 50 per cent about 18 per cent[2] have definite gall bladder disease substantiated by definite laboratory and x-ray evidence. Newer methods of investigation have helped tremendously in arriving at a positive diagnosis of gall bladder diseases. It is not always possible to arrive at a positive diagnosis through positive proof by definite laboratory and x-ray evidence of gall bladder cases, and in these cases, clinical judgment and experience must be the deciding factor in a diagnosis. In the x-ray examination of the patient it has been found that about 90 per cent[3] of the cases that have gall bladder disease will show a disturbance in the shadow cast by the dye. It is very seldom that a diseased gall bladder will give a normal cholecystogram; although in cases of gall stones in which the gall bladder itself is not severely affected, it is possible to get a normal shadow. In these cases a positive diagnosis of gall stones from a flat plate without the dye will depend upon the density of the stones. A plain flat x-ray plate for gall stones is, therefore, of little value, and would probably be indicated only in cases with severe jaundice in which so much liver cell damage has been done that the giving of the dye is contra-indicated. Other examinations that may be given the patient after hospitalization are the galactose tolerance test, the Van den Bergh test, icterus index test, and the examination of the bile following biliary drainage. The blood count will be of value in acute gall bladder cases, and the leukocyte count will be of value to determine the degree of infection present in the gall bladder. High white cell counts should make one suspicious of empyema of the gall bladder.

It is more the purpose of this paper to discuss the disposal of these patients after diagnosis than diagnosis, so no more will be said on symptoms and diagnostic measures.

In the past it has been the habit of most physicians to treat all their chronic gall bladder patients medically, whether they have a surgical condition or not, until an emergency arises. Some have done this because they have feared the high mortality rate following gall bladder operations, but this has been cut down to a figure which compares favorably with other abdominal operations. Since this has been the usual management of gall bladder cases, it was stated by Dr. Allen of Harvard University at the recent College of Surgeons meeting in Detroit, and by Dr. Kunath[4] of Iowa City, that the patient comes to surgery with an average history of six years of gall bladder disease.

Gall bladder cases should be divided into three groups from the standpoint of management: (1) those cases which have symptoms and physical findings of gall bladder disease but without colic; (2) the chronic gall bladder cases with colic; (3) the acute gall bladder cases. In the first group all should receive medical treatment because it is very likely that if they should have surgery performed they would have only a small per cent of relief from their symptoms. The high fat diet and some form of bile salts with tincture of belladonna or atropine will usually give these patients relief. In the second group all should have surgery. They have a good chance for complete recovery. The larger clinics give about 80 per cent[4] complete recovery. Those patients having stones in their gall bladder will receive more benefit from surgery than those patients having colic pains without stones. The third group has caused a great amount of controversy and the practitioner is probably considerably confused as to the proper management of acute cholecystitis. Most of the leading surgeons of this country think that the patient should be immediately hospitalized, worked up thoroughly diagnostically, and the reserve glycogen of these patients restored by intravenous glucose and then operated. These cases are, therefore, treated as an emergency. It is the consensus of opinion that the gall bladders in these cases should be removed unless there is peritonitis following a perforation of the gall bladder, unless it is difficult to identify important structures in the biliary fossa, unless severe jaundice caused by obstruction of the common duct is present, or unless the patient's general condition is so poor that the administration of a general anesthetic and a prolonged operation are not warranted. In these cases the operation of choice would be drainage of the gall bladder.

In the process of removing the gall bladder the utmost care should be used because of the injury that may be done to the common and hepatic ducts. It is probably best not to clamp the cystic duct then divide the duct and remove the gall bladder from

* Presented before the Fourth District Medical Society at Seymour, May 8, 1940.

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[2] McClure, R. D.: Diagnosis and Management of Cholecystitis. *Jour. Ind. S. M. A.* **32**:3:129-133 (March) 1939.

[3] Jenkins, E. L.: "Choleocystography." *J.A.M.A.* 107: 755-757 (Sept. 5) 1936.

[4] Kunath, C. A.: The Stoneless Gall Bladder. *J.A.M.A.* **109**:183-187 (July 17) 1937.

in outward, but rather to remove the gall bladder by starting at the fundus of the gall bladder and going from the fundus in. Dr. Allen of Harvard University has had excellent success by producing artificial edema by injecting distilled water or normal saline into the walls of the gall bladder and then removing the gall bladder. Also, it is important to note, when clamping the cystic duct, when tension is made on the gall bladder, that the common duct and hepatic duct have not been stretched up and injured in removing the gall bladder. It is probably best to make the tension down instead of either up or out when applying the forcep on the cystic duct.

Another procedure which reduces the rate of mortality in exploration of the common duct is dilating the ampoule of Vater following exploration. The rate of mortality in some of the larger clinics has been cut from 7 per cent to 4 per cent with this procedure. This procedure is nearly always followed by edema of the common duct and should be taken care of by placing a T tube into the common duct. In from five to eight days after the edema has subsided, the T tube can be removed. In the meantime, the bile drainage, after escaping through the T tube, should be restored to the patient through a duodenal tube. Patients suffering from severe attacks of gall bladder disease should not be treated over long periods of time because there will follow in these cases permanent liver damage from the hepatitis following obstruction, whether it be due to stones or edema of the ducts due to inflammation or actual extension of the inflammatory process into the liver cells giving a hepatitis. Despite the large size of the liver which is the largest gland in the body (and only one other homogenous tissue of the body exceeds it in amount and that is voluntary muscle), there will eventually follow destruction of liver cells from infection. The functions of the liver are very vital and should be preserved as much as possible.

The physiology of the liver and gall bladder is a fascinating study but it is not the purpose of this paper to review this subject; it is to plead for closer management of gall bladder cases to insure better health to these patients.

ABSTRACTS

SYPHILIS

Among the 20,000,000 men of draft age in the United States, 324,000 today are infected with syphilis, Assistant Surgeon General R. A. Vonderlehr of the U. S. Public Health Service told the Junior Chamber of Commerce in Washington.

Syphilis is responsible for more nonproductive man days in persons 20 to 39 years of age than the time lost through casualties during the entire period of the last world war.

"In a time when man-made earthquakes are rocking the world, we must neglect no necessary actions to conserve our manpower and our industrial efficiency. Syphilis and gonorrhea are direct threats to both," the Chief of the Division of Venereal Diseases of the Public Health Service emphasized.

"There must be no slacking up of our efforts to control syphilis and gonorrhea in each city, town, and county," Doctor Vonderlehr stated. Comments were made in a letter to Perry Pipkin, National President of the Junior Chamber of Commerce, read before the closing session of the annual conference. The text follows:

When arrangements were first made to stimulate activity among units of the Junior Chamber of Commerce with regard to control of syphilis by means of a contest sponsored by the Chamber and the American Social Hygiene Association, the major motivation was humanitarian. Today that motivation is joined with another, the necessity for comprehensive defense of the Nation, and in a broad sense, of course, interest in national defense is also humanitarian—a keen and invigorating desire to maintain the basic principles of life, liberty, and the pursuit of happiness.

Physical defense of the United States requires able and healthy men. Yet, as we look back at our experience in the last great World War, we must heed the fact that venereal disease infections constituted one of the major causes of disability among draftees. Estimates today indicate that of the 20,000,000 men between the ages of 20 and 39 years, 324,000 today would be found infected with syphilis. The significance of this estimate is evident when we recall that syphilis causes more potential noneffective man days in this group than were lost through the casualties to the 260,783 men killed or injured in action during the entire World War.

Today we realize that effective manpower, not only in the armed forces, but also in the civilian population is the deciding factor in modern military defense because increased industrial efficiency is of prime importance to national security. We must, therefore, look carefully to the health of the men and women in the factories of the United States. And in so doing, we must recognize that syphilis and gonorrhea among individual workers are important obstacles to full industrial production.

In a time when man-made earthquakes are rocking the world, we must neglect no necessary actions to conserve our manpower and our industrial efficiency. Syphilis and gonorrhea are direct threats to both.

There must be no slacking up of our efforts to control syphilis and gonorrhea in each city, town and county. In a very real and direct sense such control efforts are for national security.

HAY FEVER UNRELIEVED BY HISTAMINASE

Histaminase failed to give relief to any of his fifteen patients with ragweed hay fever, Edmund L. Keeney, M.D., Baltimore, reports in *The Journal of the American Medical Association* for June 22.

"Since histaminase is advocated as a drug effective in controlling disorders of an allergic nature, it seemed that its benefits could be most accurately determined by its use in the treatment of patients with seasonal hay fever," he says.

"Histaminase was administered by mouth to fifteen patients with typical ragweed hay fever during the height of the 1939 ragweed season. It failed to give relief to any of the patients. Any fluctuation in symptoms that occurred could be accounted for by a concomitant fluctuation in the pollen concentration of the atmosphere."

Medicine Today

"Be not the first by whom the new are tried, nor yet the last to lay the old aside."

DALLAS FICKAS, M.D.
Evansville

The problem of nutrition has, within the last few years, been receiving increasing attention. Not more than a quarter of a century ago, the original work on vitamins was started. Immediately afterward, great emphasis was given to similar studies until many vitamins were discovered and there are possibilities of more to come. With the discovery of the vitamins, the solution of most nutritive problems was attempted by the addition of these dietary factors, and their use has given brilliant results. However, within the past few years it has become more evident that most nutritive failures are not due to a single factor but are more apt to be the result of multiple deficiencies—the deficiency of the essential food materials such as proteins, carbohydrates, and fats.

Important, too, is the growing knowledge that nutritive failure is not necessarily the result of failure of supply, but may be due to poor digestion, absorption, or utilization. Nutritive failure is frequently encountered in people who have adequate diets. This fact was recognized when Castle discovered that pernicious anemia was due to some deficiency in the digestive tract.

The recognition of borderline nutritive failures is difficult because there are no adequate laboratory or clinical bases for their detection. Much work is being done along this line. The estimation of the ascorbic acid of the blood, the capacity of the eye for dark adaptation as a means of estimation of vitamin A deficiency, the estimation of blood plasma proteins are all important new additions.

Borderline conditions of malnutrition are probably more frequent than the average physician realizes. Holman,[1] in a study of 70 patients from low economic levels, found that 44 per cent of them showed low ascorbic acid values. Nine of these patients were on the verge of clinical scurvy. Thirty-eight patients studied for dark adaptation showed that 26 per cent had a marked deficiency in vitamin A. Similar studies carried out elsewhere have shown that the average deficiency in vitamin A is somewhere between 24 and 36 per cent.

The symptoms presented by these cases of borderline malnutrition are necessarily varied but in the main they present easy fatigue, both mental and physical, anemia of varying grades, digestive disturbances of every type, variable aches and pains, a low basal metabolic rate in most instances, dryness of the skin, and emotional instability. In fact, many of these cases are labelled as neurasthenia.[2]

Of importance to every practitioner of medicine, regardless of his specialty, is a newer work which is being done on protein metabolism. Protein materials, when broken down, yield 22 known amino acids. Ten of these cannot be synthesized by the body and, therefore, are called essential amino acids. Studies on nitrogen balance show that the absence of even one of these essential amino acids from the diet causes the body to be unable to hold any of its protein intake. Since few protein foods contain all of these essential amino acids, it is necessary that the protein intake be varied to insure adequacy. The volume of the circulating blood is primarily dependent upon the supply and nature of the electrolytes and the available water in the organism. Other substances, principally the plasma proteins, play an important part in maintaining the proper fluid balance between the extracellular fluid and the circulating fluid in the blood vessels. A prolonged restriction of protein intake results in a deficiency of the labile protein stores. As the plasma proteins are reduced in concentration from a normal level of 7½ grams per 100 cc. of blood, the circulating fluid begins to leave the blood vessels, causing first a latent and later, at about 5½ grams, a frank edema. In patients with reduced protein levels, the excessive use of sodium chloride causes edema production above the critical protein level. In pyloric obstruction, gastric and duodenal ulcers, cancer of the stomach, biliary tract disease of long standing where there has been restriction in diet—in fact, in any condition where a state of malnutrition exists—a deficiency in total plasma protein nearly always is present when the patient is first seen. In many of these patients, because of dehydration, the plasma protein level when determined is about normal. However, when the dehydration is corrected, the plasma protein necessarily falls and either latent or frank tissue edema results. It is important to realize that tissue edema may affect not only the subcutaneous tissues but the tissues of various viscera as well.

Ravdin[3] pointed out that after gastric operations, if the plasma protein level is reduced, the postoperative picture may in many instances mimic a defect in the anastomosis. However, with the correction of the low protein level, a perfectly normal function returns. In acute intestinal ob-

[1] Holman: *Surgery, Gynecology & Obstetrics*, **70**:261, February, 1940.

[2] McLester: *J.A.M.A.*, **112**:2110, May, 1939.

[3] Ravdin: *Annals of Surgery*, **109**:321, March, 1939.

struction, Fine and his associates[4] demonstrated that there was a rapid and marked fall in plasma volume. Intravenous plasma prolonged life in experimental animals and intravenous saline solutions were of little help.

It is of interest to review the ways by which a low protein level may be corrected. If sufficient time is available in the treatment of these patients and if the condition of the gastro-intestinal tract is such that absorption is possible, an increased protein diet by mouth should achieve a good result. It is important in this connection that protein diets should be adequate and should contain the essential amino acids. This is most easily achieved by having the protein in the diet derived from various protein sources. If sufficent time does not exist for correction in this manner, the use of blood tronsfusions is the surest method. If anemia is not present, the use of blood plasma is more logical. This procedure will become increasingly common in the future. In many research institutions in the country today, intravenous amino acids are being tried experimentally. The solutions used are complete in all the essential amino acids. They are non-anaphylactic when used intravenously. A great amount of work remains to be done, but experimental and clinical results indicate that a new and brilliant method may soon be available for the treatment of those patients who, too sick to take food by mouth, may have a supplement not confined to sugar alone but to include the protein elements as well.

The future is promising for the solution of the problem of malnutrition and, when it comes, a more accurate selection and preparation of surgical patients and a more scientific treatment of medical patients will result.

[4] Fine, Fuchs, Gendel: *Arch. Surgery*, **40**:710 April, 1940.

CASE REPORT: CHRONIC LYMPHATIC LEUKEMIA COMPLICATED BY TYPE III PNEUMOCOCCUS PNEUMONIA. RECOVERY FROM PNEUMONIA WITH SULFAPYRIDINE AND SERUM*

LEON L. BLUM, M.D.
STUART R. COMBS, M.D.
Terre Haute

The recovery of a patient with chronic lymphatic leukemia from a particularly virulent type of pneumococcus pneumonia treated with sulfapyridine and serum clearly illustrates the recent advances made in the management of pneumonia. It also introduces a note of optimism into the prognosis of chronic leukemia.

CASE REPORT

C. B., white, business man, 60 years of age, consulted us in February, 1938, complaining of pain in the abdomen and shortness of breath. His illness began about two years previously when he had frequent sore throat and noticed a gradual enlargement of cervical lymph nodes. He also noticed some hearing impairment which was attributed to swollen and enlarged tonsils. The tonsils were removed and some time later he had an erythematous eruption of the face which was thought to be erysipelas. He recovered and returned to work feeling fairly well until three weeks before consulting us. At this time he said he overexerted himself and the following morning was somewhat short of breath, was nauseated and vomited. About four days later he began to have a pressing pain in the upper part of the abdomen. It was not connected with food intake. He felt as if his abdomen became swollen and shortness of breath became more marked, and these symptoms increased in severity; he was unable to work (with temperature ranging up to 104° F.) and he decided to consult a physician.

The patient's past history was negative; he always had been in good health up to his present illness. The family history was not contributory and there was no history of blood dyscrasias.

Physical examination revealed an elderly male, acutely ill, and with moderate respiratory distress. His skin was hot, dry, and inelastic. There was a generalized lymph adenopathy with tender, matted, enlarged cervical and posterior-auricular lymph nodes. The epitrochlear, axillary and inguinal nodes were less prominent, but easily felt. The tonsils had been removed, but there was a small amount of hyperemic lymphatic tissue in each tonsillar fossa. A few atelectatic rales were heard over both lung bases; otherwise the lungs were negative. The heart was normal in size and position, and the rhythm was regular. The liver was smooth, slightly tender, and extended down to the umbilicus. The spleen edge was similarly tender and descended down to the iliac crest. No other organs or masses were palpable. The extremities were negative, and the reflexes physiological. The temperature was 102° F; pulse 116; blood pressure 128/82.

Examination of the blood showed a red cell count of 4,800,000 per cu. mm. with 15.1 Gm. hemoglobin (Sahli-Klett, 104%). The white cell count was 25,850 per cu. mm. with 2% band forms, 7% segmented neutrophiles and 91% lymphocytes. Most of the cells resembled small mature lymphocytes. There were no "abnormal lymphocytes" as occur in infectious mononucleosis. A moderate number of degenerated cells ("basket cells") were

* From the Clinic of Associated Physicians and Surgeons and Union Hospital, Terre Haute.

seen in the blood smear. The red blood cells presented no abnormalities. The platelets were normal. The hematologic indices were within normal limits. The urine showed a faint trace of albumin with 2-3 red blood cells per high power field. The Kahn and Kline tests for syphilis were negative.

The diagnosis of chronic lymphatic leukemia was made and confirmed by subsequent blood examinations. A summary of blood counts appears in Figure 1. The patient was treated with roentgen rays over the spleen and the enlarged cervical nodes and felt improved. In July, 1939, he developed multiple skin lesions over the hands, face, back and legs consisting of erythematous papules, macules and occasional vesicles. The lesions varied from a few millimeters to a few centimeters in size. There was also a continuous itching, not relieved by antipruritic ointment. These lesions were considered by us as skin manifestations of leukemia. No tumor-like formations were observed. The patient continued to receive irradiation of the spleen by roentgen rays depending on the blood status and subjective symptoms. He was able to continue his work up to December 29, 1939. On

TABLE I—SUMMARY OF BLOOD COUNTS

Date	*Hemoglobin Gm. per 100 cc.*	*%*	*R.B.C.*	*W.B.C.*	*Lymphocytes per cent*	*Clinical Notes*
2/19/38	15.1	104	4,860,000	25,850	91%	Complains of pain in abdomen and shortness of breath.
3/ 2/38	14.5	100	4,600,000	17,450	92%	
5/13/38	13.3	92	4,260,000	14,350	84%	T. 101.2 F. Lost 5 lbs. during 3 wks. Severe pain in upper abdomen. Maculo-papular exanthem over body.
6/ 2/38	14.2	98	4,550,000	14,700	80%	
8/10/38	14.5	100	4,760,000	17,900	86%	
12/19/38	15.4	106	5,050,000	46,900	87%	
3/ 8/39	14.4	99	4,520,000	64,000	92%	
7/29/39	12.7	88	4,280,000	127,750	96%	Appearance of new skin lesions. Itching.
9/26/39	14.5	100	4,850,000	168,250	96%	
12/ 1/39	13.9	96	4,640,000	232,000	97%	
12/31/39	13.1	90	4,460,000	302,000	97%	Hospitalization with pneumonia. T. 105 F.
1/ 1/40				244,000	95%	
1/ 2/40	12.5	86	4,240,000	290,000	97%	Maximum T. 100 F. (rectal)
1/ 3/40	12.7	88	4,200,000	356,000	97%	
1/ 4/40				340,000	96%	
1/ 5/40	13.1	90	4,090,000	322,000	94%	
1/17/40	11.6	80	4,200,000	313,000	98%	
2/10/40	13.2	91	4,010,000	162,000	95%	After intensive irradiation of spleen and cervical nodes.
3/22/40	13.6	94	4,130,000	139,000	98%	
7/28/40	13.1	90	4,330,000	337,000	98%	Patient working and offers no complaints.

Figure 1. Table showing a summary of blood counts for 2½ years.

this day he experienced a sudden chill with a rise of temperature up to 104° F., and he developed a sharp pain in the right axillary region with a hacking cough. The cough was productive of a thick sputum which later became rusty in appearance.

The patient was admitted to the Union Hospital on December 31, 1939. His face was flushed. There was a deep cyanosis of the lips and nail beds, and a short grunting expiration. There was dullness over the right upper lobe anteriorly and posteriorly. Over this entire area the breath sounds were bronchial in character with numerous crepitant rales. The heart rate was rapid but regular and no murmurs were heard. The liver and spleen were markedly enlarged but not tender. The temperature on admission was 103° F. (rectal) and it rose in a few hours to 105.2° F. The pulse rate was 120; respiration rate was 30.

Examination of the sputum showed many Gram-positive diplococci which, by means of the Neufeld reaction were identified as pneumococcus Type III. The "Quellungs reaction" was very pronounced and some of the pneumococci were arranged in short chains. Examination of the blood showed a red cell count of 4,460,000 with 13.1 Gm. hemoglobin and white cell count of 302,000 with 97% lymphocytes. Examination of the urine was negative, except for one plus albumin. No red blood cells were seen in the sediment.

Examination of the chest with a portable x-ray machine showed a homogeneous density of the entire right upper lung, indicating a lobar pneumonia. There was also an increase in the width of the mediastinal structures especially on the right side, apparently due to leukemic enlargement of hilar nodes. (Figure 2.)

After a preliminary negative skin test with normal rabbit serum, the patient received, without delay, a total of 100,000 units of refined and concentrated rabbit anti-pneumococcus serum, type III, intravenously. This was given in five doses over a period of 18 hours. A blood culture was taken before the first serum injection and proved to be sterile. Three hours after the first administration of serum the additional treatment with sulfapyridine was started, the patient receiving 1 gram every 4 hours for four doses, then 0.5 gram every 4 to 6 hours for a total of 12 grams. The blood concentration of sulfapyridine (Marshall-Bratton method) ranged from 3 to 6.2 mg. per 100 cc.

The response to this treatment was striking. In less than twenty-four hours the temperature dropped from 105.2° F. to 101° F. and reached the level of 98.2° F. on the third day of hospitalization (fourth day of disease). The patient complained of a transient pain over the liver; otherwise, he showed no signs of toxic effects from either sulfapyridine or serum administration. He was discharged from the hospital on the ninth day, after the temperature had been normal for three days (See Figure 3.)

Following his discharge from the hospital, the patient made an uneventful recovery. On January

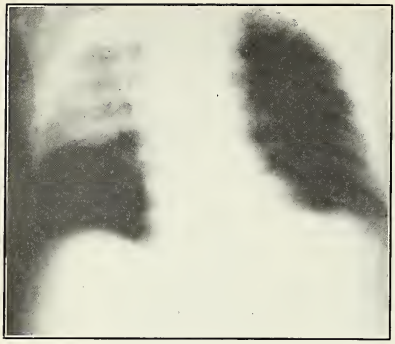


Figure 2. Homogenous density of the right upper lung field.

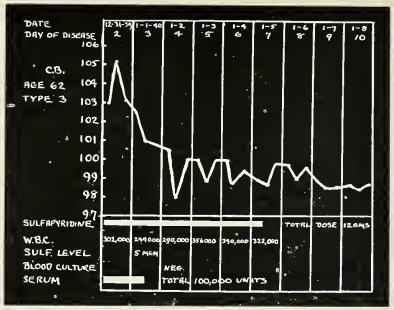


Figure 3. Temperature chart showing the response to treatment of pneumonia.

17, 1940, x-ray examination of the chest showed only a slight residual pneumonitis of the right upper lobe. He was given a course of treatment with roentgen rays over the spleen, receiving 1300 r units in two months. He resumed his normal activities and was last seen on June 27, 1940, about 4½ years after the onset of the leukemia and 2½ years since the beginning of treatment.

At this time examination of the blood showed a red cell count of 4,330,000 with 13.1 Gm. hemoglobin (Sahli-Haden). The white cell count was 337,000 with 98.5% of lymphocytes. The blood smear showed only a few occasional immature forms. Occasional lymphocytes were seen in amitotic division. The red blood cells appeared normal. The platelets numbered 194,000 per cu. mm. (Fonio method). The sedimentation rate (Wintrobe) was 9 mm. per one hour. The volume of packed erythrocytes and all hematologic indices were within normal limits. The examination of the urine was entirely negative.

Physical examination revealed a marked splenomegaly and hepatomegaly, the spleen extending for 13 cm. below the costal margin. The liver was palpable 10 cm. below the costal margin in the midclavicular line, and was slightly tender. The cervical and axillary lymph nodes appeared reduced in size in comparison to the previous examination. The hearing was markedly improved. The lungs and heart were normal on percussion and auscultation. There were no hemorrhagic manifestations. Although the white cell count was above 330,000, the patient felt quite comfortable, did not offer any complaints, and was engaged in his normal activities.

COMMENT

This case presents several remarkable features. The onset of leukemia was quite typical with early involvement of the lymphoid tissue of the tonsils. Any enlargement of the tonsils in an elderly person without obvious cause should arouse the suspicion of leukemia. The hearing impairment was apparently due to leukemic infiltration and improved following irradiation. The absence of anemia, thrombocytopenia, and any hemorrhagic manifestations were relatively favorable signs. And then, at the age of 62, the patient developed a lobar pneumonia due to a most virulent type of pneumococcus against which it is very difficult to produce a potent antiserum either in the horse or in the rabbit. The mortality from type III pneumococcus pneumonia is high even among younger persons not afflicted by a systemic disease. And it is a known fact that patients suffering from chronic leukemia frequently have a lowered resistance against bacterial infection. This may be partly due to a decreased phagocytic power of the leukemic leukocytes. Only the mature leukocytes have the ability to act as phagocytes while the immature cells of leukemia entirely lack this ability and do not participate in the defense reaction against bacterial infection. But some recent studies seem to indicate that the lymphocytes play a part in the resistance of white mice against the action of pneumococcus type III.

Although antipneumococcus serum, type III, was given without delay, the advisability of sulfapyridine administration was carefully considered. The following questions were raised:

1. Does the presence of a serious blood dyscrasia, such as leukemia, with only 3% of polymorphonuclears, constitute a contra-indication against sulfapyridine administration?

2. Would not the bone marrow already damaged by the leukemia process be particularly vulnerable to the action of a drug containing the benzamine group which is frequently responsible for injurious action on the myelogenous tissue?

The reports in the literature on the possible toxic effects of sulfanilamide and its compounds on the hematopoietic system are already so numerous as to warrant very careful consideration. These toxic effects may result in granulocytopenia, agranulocytosis, or acute hemolytic anemia. They

may in part represent a kind of allergic reaction of the bone marrow, but unfortunately a test for hypersensitiveness to sulfapyridine or its compounds does not exist as yet.

We decided that sulfapyridine would not constitute a contraindication in the presence of a blood dyscrasia *if* proper control measures were carried out very carefully. Furthermore, the absolute number of mature leukocytes in our patient at the time of hospitalization was 9,000 per cu. mm. in spite of its relative number of only 3%.

As seen from our case report, sulfapyridine was administered with a dramatic response and without any complications. The white blood count remained at the high level of around 300,000 and the relative number of mature leukocytes showed no significant changes. Ordinarily in the course of pneumococcus pneumonia there is a great increase of polymorphonuclear leukocytes. Some cases of leukemia also show a marked increase of polymorphonuclears in the course of infection with a drop of the total number of leukocytes to an almost normal level, only to return to the leukemic level after the subsidence of the infection.

The laboratory control measures following administration of sulfapyridine included:

1. Daily blood counts at the start and hematologic observation for two weeks after cessation of treatment. (The latter is necessary to recognize late toxic effects.)

2. Repeated urinalyses with particular attention to the appearance of microscopic or gross hematuria.

3. Frequent determination of the level of sulfapyridine in blood.

These tests should be done in every case under treatment with sulfanilamide or its compounds in order to recognize early toxic effects.

If we raise the question whether antipneumococcus serum or sulfapyridine was primarily responsible for the dramatic recovery, it cannot be answered with certainty. However, in view of the still improved efficiency of antipneumococcus serum, type III, we are inclined to give most of the credit for the recovery to the action of sulfapyridine. Unfortunately, the Francis skin test with type specific polysaccharide, which is a valuable guide for determination of dosage and efficiency of serotherapy in pneumonia, was not carried out. In spite of the effective action of sulfapyridine or sulfathiozole on pneumococcus irrespective of its type, the sputum typing should be done in every case of pneumonia. The most efficient method of treatment of pneumonia is in many cases the combination of sulfapyridine or sulfathiozole with type specific antipneumococcus serum.

SUMMARY

1. A case of chronic lymphatic leukemia is presented in which a dramatic recovery occurred from a complicating type III pneumococcus pneumonia following combined administration of sulfapyridine and serum.

2. The absence of anemia or thrombocytopenia is an important point rending the prognosis of chronic leukemia relatively more favorable.

3. With proper indication and control measures, sulfapyridine does not appear to be contraindicated in case of blood dyscrasia even if accompanied by marked relative depression of granulocytes.

4. The proper control measures should include daily blood counts at the start and hematologic observation for at least two weeks following cessation of sulfapyridine treatment; there should be frequent urinalyses and determination of blood concentration of sulfapyridine.

5. The efficiency of antipneumococcus rabbit serum, type III, needs further evaluation.

221 South Sixth Street

PROTECTION AGAINST IVY POISONING

Protection against ivy poisoning is possible by use of an alkaline vanishing cream containing sodium perborate or potassium periodate, according to a report by the United States Public Health Service.

This protective ointment for the prevention of ivy poisoning consists of 10 per cent sodium perborate in a vanishing cream which is to be rubbed into the skin of the arms and face of workers before exposure to poison ivy. The vanishing cream fills the pores and forms a protective covering and prevents much of the poison from penetrating the skin.

As the perspiration comes in contact with the vanishing cream in the pores of the skin, a soap is formed and the alkalinity of the soap tends to neutralize the poison ivy, in addition to washing it off and out of the skin. This ointment was developed in the Office of Dermatoses Investigations at the National Institute of Health, Bethesda, Md., and reported in the weekly publication of the United States Public Health Service (Public Health Reports Vol. 55, No. 27).

This vanishing cream should be freshly prepared at least once in two weeks to avoid deterioration. The cream used in the experiments was slightly discolored but still active after one month.

In the case of persons working where they might come in contact with poison ivy, the protective cream should be applied in the morning and allowed to remain on until the noon hour when it should be removed by washing with soap and water; this will emulsify the vanishing cream in the pores of the skin and wash away whatever poison may be in the pores or on the skin.

The cream should be reapplied again after the lunch hour and again washed off in the evening when work is over.

These findings are based on results with a limited number of voluntary workers.

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AUGUST, 1940

Editorials

PLATFORM OF THE AMERICAN MEDICAL ASSOCIATION

The American Medical Association advocates:

1. The establishment of an agency of federal government under which shall be coordinated and administered all medical and health functions of the federal government exclusive of those of the Army and Navy.

2. The allotment of such funds as the Congress may make available to any state in actual need for the prevention of disease, the promotion of health and the care of the sick on proof of such need.

3. The principle that the care of the public health and the provision of medical service to the sick is primarily a local responsibility.

4. The development of a mechanism for meeting the needs of expansion of preventive medical services with local determination of needs and local control of administration.

5. The extension of medical care for the indigent and the medically indigent with local determination of needs and local control of administration.

6. In the extension of medical services to all the people, the utmost utilization of qualified medical and hospital facilities already established.

7. The continued development of the private practice of medicine, subject to such changes as may be necessary to maintain the quality of medical services and to increase their availability.

8. Expansion of public health and medical services consistent with the American System of democracy.

HAVE YOU MAILED THE BLUE SHEET?

The United States is not at war with any nation; we devoutly trust that she will not become so engaged. Yet, with more than two-thirds of the population of the entire world engaged in trying to bring about death and destruction to all others, one cannot foresay what may come to us. So serious is the world situation that our government is going about a program of preparedness of such proportions that a few years ago would have seemed unbelievable.

The Indiana State Medical Association, ever alert and prompt to plan for any and all emergencies, some time ago appointed an "M-Day" committee. That this committee promptly went into action and produced results is evidenced by the fact that at the recent session of the American Medical Association our program was presented to the House of Delegates and received with much acclaim.

The committee had inserted into the July number of THE JOURNAL what we now refer to as the "blue sheet." The committee asks that every member of our Association answer the questions thereon and mail the sheet to the chairman of the committee.

Every member of organized medicine throughout the country will receive a similar blank from the American Medical Association. Even though you have filled out the A.M.A. blank, *do the same* for your State Association. It simply asks that you go on record as to what you are willing to do in the event mobilization is called for at some future date.

Many of us recall the experiences of World War I. Perhaps not so many remember that during the month of April, 1918, Indiana stood *forty-second* in the list of states as regards enlistments in the medical corps, and that the medical section of the State Council of Defense spent no little time in the consideration of what might be done about it. However, on the evening of Lusitania Day, a special meeting of every county medical society in Indiana was held, resulting in the enlistment of several hundred Indiana physicians.

Your M-Day committee wants to avoid a repetition of such a situation; it wants to be able to report to the American Medical Association—and at a very early date—that the medical profession of Indiana is READY! Some time ago a similar letter was sent to members of the Canadian Medical Association and in an incredibly short time *ninety per cent* of its members had answered and their answer was that they were *ready!*

Your M-Day committee has shown plenty of action; now they ask you to act. We want to know just how many physicians can be depended upon to render such services as may be needed. It should be borne in mind that not all our members would be called for away-from-home service in any event. We learned from experience in the former war that the folks back home needed medical attention and in many instances all the available physicians in a

community had enlisted. This is but one of the things we hope to avoid, should occasion arise that would call for enlistment of any considerable number of physicians.

If you have not already sent in your answer, turn to the back page of the July JOURNAL, detach the blue sheet, answer the questions, and get it into the mail *right now*.

The M-Day committee wants to know, your State Association wants to know, the American Medical Association wants to know, and the Nation wants to know what Indiana Medicine is going to do about it, IF and WHEN.

FUTURE LEADERSHIP

The American people must grasp the fact that the disaster in Europe is due to political leaders of all parties who for twenty years have refused to look at the facts and have offered the people popular slogans instead of the truth. With leaders of this sort, democracy could not survive in Europe nor can it survive here.

Recent world events develop for us three important lessons: (1) Unless an economic system can give effective security to the masses of people, they will become the tools for political adventurers; (2) We have been blind to the irrational impulses in people, and to the manner in which ideas may be used in stirring up these irrational impulses; (3) In peace or in war, only a well organized society can survive. These are unpleasant thoughts.

To achieve economic security will necessitate a titanic effort of the mass will, and to most of us what will seem to be a revolution in the economic structure. The recognition of the irrational attitudes in people will shatter many of our cherished illusions about human nature. The absolute necessity of planned organization of all of our resources certainly will disturb our traditional concepts of individualism. These thoughts, too, are unpleasant, but that is beside the question. There will be little comfort, if we are in concentration camps or front line trenches, to know that we have held to our traditions!

The world into which we are passing is a new world, one which will require new leadership and new methods. This does not mean the death of democracy, but an urgent need for democracy's regeneration. It will require more than a military machine to meet the challenge of the totalitarians; it will require ideas and ideals to enthuse our people and to give them fortitude to face the years ahead; they will need to have faith in their future. We must quickly restore the morale which has been shaken by the rapidly moving events overseas.

Each of us in his own community must teach the people to adopt a long term view of life so that they will not succumb morally to the thought that the catastrophies of today bar the roads to the future. We must do everything that can be done to preserve those values of life that seem on the way to extinction in Europe. This is our debt to the order in which we live, and which we have helped to create; above all, our children must not be permitted to grow up in an atmosphere of despair which may make them vulnerable to the evils of moral disintegration.

Medicine today is called upon to think in new terms and to make adjustments that will be most far reaching. Medicine today must re-survey its very foundations. It must revaluate its principles in the light of changing conditions. Much that we have considered fundamental will change; many of the things that we have cherished will be discarded. All of this will require an heroic effort of the collective will on our part, and leadership of the highest order—leadership with *vision, imagination*, and *courage!*

TELL OTHERS ABOUT IT!

While chatting with a local physician the other day, the conversation drifted into a discussion of some of the newer drugs and the sulfanilamides were mentioned. We asked this physician what his experiences were in the use of this group in the pneumonias. He at once became very enthusiastic, declaring that his results were uniformly good and that at times he was amazed at the response the patient made to the drug, especially in pneumonia in children.

A few days later we called on a physician in a neighboring community and he was telling us about some work he was doing in what he termed chronic undulant fever, that he had under observation some two-score cases and went into some detail as to the rather unusual symptomatology attending these cases. He stated that he was doing considerable laboratory work in connection with his studies and that as a result he was convinced that undulant fever frequently became chronic and that this type of case was commonly mis-diagnosed.

These are but two of many similar instances in which we have heard our members discussing some of their experiences. Others are heard to remark that they have found "short cuts" in the management of certain diseases. On the other hand we rather often hear medical men comment to the effect that a treatment found useful by others has proved to be a failure in their hands.

It is just such material that we like for use in THE JOURNAL. As a matter of fact it is our opinion that most of our members find this more interesting than certain of the "research" type of papers that have to do with a lot of laboratory work, etc. One of the most interesting writers of the present day, a man who finds time to contribute a page or so to each issue of *Southern Medicine and Surgery*, is Dr. J. K. Hall, of Richmond, Virginia, who writes in a homely fashion, discussing subjects that are commonly met in the practice of medicine.

We are not decrying the socalled "high brow" type of papers; they have their place, and a large place it is, in medical literature; but it is believed that right here in Indiana we have plenty of material for our JOURNAL, material that for the nonce is locked up in the brains of Indiana physicians. It is this material that we seek because we feel certain that it will meet with a hearty reception.

Some physicians are heard to say that they do not submit papers for the reason that they are not experienced writers. Our answer to this is that the JOURNAL staff stands ready to edit all worthwhile material that is submitted. Not all the material that is sent to us is ready for use; much of it must be edited and we are very glad to offer this service.

If you have unusual experiences in your daily work, if you find that a certain new drug is especially efficacious in your hands, tell Indiana doctors about it. We like to know what is going on in the offices and in the practices of our members; we want to tell others about it.

"SHALL WE CALL A DOCTOR?"

The above is the title of an article which appeared in the Spencer, Indiana, *World*, last February, written by Edna H. Sinclair, who seems to make regular contributions to that paper under the intriguing head, "An Owen County Housewife Looks Through Her Window." The writer raises a question that has given us a lot to think about and the answer to which is not as yet forthcoming.

It seems that Owen county is considering the local hospital problem and the article in review is directed toward that subject. The writer states: "Personally, we have not known anyone able to pay for hospitalization who could not receive such care because of lack of facilities or because of crowded conditions in nearby institutions. We do know of many neglected cases due to economic pressure; and we believe the hardest hit class in this respect are those of us who are not rich, but proud enough to want to pay our own way. This same attitude keeps many of us from seeking needed medical services from our local physicians." Then follows what is to us the most interesting phase of her discussion; she comments on "the loss of time, personal inconvenience and general irritation in trying to see a local physician at his office." She declares that some of the country folk of Owen county are beginning to "voice their disgust" over the delay and suggests that the Owen County Medical Society do something about it!

Again quoting: "It is often true that a physician's popularity gains him a crowded office; his age and the location of his office have something to do with the business he does. Perhaps many people are coming to this same decision. We hear this opinion expressed more and more frequently."

She suggests a solution of the problem, but we do not quite understand that solution, when she says, "Is it an utterly nit-wit idea that medical services can be brought to our door, as other services are, in equipped sanitary offices on wheels? We should like to see some of these methods tried before we try socialized medicine and a happy solution worked out by the doctors themselves working with rural leaders."

So, it is suggested that we have our offices, fully equipped, on wheels, that we may answer calls for our services, transporting that office to the door of the home of the patient! Surely this is a new idea, but one that obviously is wholly impractical.

However, the lady has presented something of a problem, that of the element of time so often necessary to make a professional call on one's physician. Every doctor with a considerable practice has heard such complaints and many of them have wracked their brains for a solution; there just isn't any. For almost four decades we have been dropping in on various doctors, trying to find a time when we could have a few moments with them, and usually have found patients waiting their turn.

In the past few weeks we have had occasion to make several visits to a medical friend located in a socalled country community. He has a commodious office and at each visit we found patients waiting. Frequently newcomers would step in and ask how long the doctor would be in and if they would have time to do some shopping before they saw him; others seemed content to sit and await their turn.

For the average physician, specific appointments are out of the question, that is, appointments for an exact hour; few physicians can estimate the time required to attend a particular patient. Then, too, comes the element of cancelled appointments, patients who are late in keeping their appointments, etc. There are but few doctors whose business is such that this can be done.

We often regret our delay in seeing patients but do not know what can be done about it; if the members of the Owen County Medical society have taken Mrs. Sinclair seriously in this and have evolved some plan whereby patients are seen immediately upon arrival at the office of the physician of their choice, we should like to know the details.

SOCIALIZED MEDICINE

On June twenty-first, the Indianapolis *Star* published an editorial concerning socialized medicine. Dr. Charles R. Bird, of Indianapolis, stimulated by the *Star's* editorial, wrote to us at length (not for publication), and his letter set forth many facts some of which may not be well known to our members. For instance, Dr. Bird says: "Government agencies are notoriously more expensive to operate than when operated by private enterprise. Any private hospital conducted on the same basis as a U. S. Veterans Hospital, e. g., would go bankrupt

within a year. The reason: topheavy organization; multiplicity of clerks, filers, typists, heads and subheads; lack of personal responsibility of personnel; no thought or care as to length of stay in hospital of a given patient. Except perhaps in large centers of population, and in a few states where taxable assets are insufficient for revenue purposes, the underprivileged get adequate medical care. It is doubtful if a single individual last year was denied needed medical attention in Indiana."

Dr. Bird proceeded to cite the fact that a family may be classed as indigent, yet have enough to live on: "Many people are indigent as to world's goods; but they may have a cow, chickens, a garden, and a hovel to live in; therefore, they do not have to call on the township trustee; but when illness overtakes them, they must do so; in other words, they are not economically indigent but they are medically indigent."

Some figures concerning hospitalization in Indianapolis institutions were given and they are of much interest to all of us, especially the taxpayer—and who does not pay taxes! The average number of hospital days per patient, as set forth by Dr. Bird, in four institutions in Indianapolis, is as follows: Methodist hospital, 6.5; City Hospital, 16.3; University Hospitals, 19.3; *Veterans Hospital*, 36.8. In reviewing the above capitulation, it is well to bear in mind that the first named hospital is privately owned and for the most part the patients treated therein are pay patients. The second hospital is classed as a charitable institution; the third group comprise the state institutions, and the fourth in the list is a federal hospital and does not register pay patients. The figures speak for themselves. They clearly indicate, as Dr. Bird points out, "that the further we get away from local control, the greater is the increased cost in almost geometrical proportion." "It is no exaggeration to say that 95% of the patients in the Veterans' Hospital could be immediately discharged, without detriment to them. This does not mean that many of them do not have disabilities, but those disabilities are static, and nothing can be done about them in or out of the hospital."

Other nations that have gone in for socialized or governmental medicine, notably Germany, are mentioned and experiences cited. In 1888 Germany adopted its first plan of what we now know as socialized medicine; at that time and for some few years later, she was the acknowledged medical center of the world. Physicians from every country flocked there for postgraduate study. Today, even before World War II, Germany stands at least fifth in this regard.

Dr. Bird concludes his letter by paying respects to certain men of medicine who have wandered far from the paths of medical rectitude—notably Hugh Cabot—and he makes it clear that such recalcitrants should not be taken too seriously.

The best means of combating the proponents for the regimentation of the medical profession is to answer their various effusions.

Editorial Notes

"We have a duty, each and every one of us, which must be done. Our duty is to prepare for the worst, to begin acting at once on the assumption that the Allies may lose the war this summer, and that before the snow flies again we may stand alone and isolated, the last great democracy on earth."

—Walter Lippmann, New York *Tribune*.

Alvarez, in the Mayo Clinic *Bulletin* for June 12th, discusses the cure of migraine by inducing an early menopause. Forty-two cases were studied with a cure reported in six, five were "better," sixteen remained the same or were better for a while, and fifteen became worse.

Commenting upon the election of Frank Lahey as president-elect of the American Medical Association, the *New England Journal of Medicine* states that this is the first time in forty-eight years that Boston has had such an honor. During the first fifty years, the American Medical Association had chosen six New Englanders (four of whom were from Massachusetts), as its titular head. Somehow or other, Indiana has gone for some ninety-three years without a similar honor.

Venereal Disease Information, a publication issued by the United States Public Health Service, states that in 1938 there were 78,000 patients discharged from clinics as cured of syphilis, or with syphilis arrested; that in the following year, 1939, this number was increased to the sizable figure of 103,000. With increased funds available for 1940 it confidently is expected that the number of discharged cases of syphilis will reach near the two hundred thousand mark.

Our interest in a certain phase of the October meeting at French Lick amounts almost to curiosity; we will watch very closely the doings of the Woman's Auxiliary ("Henry" Waterson, Lake County executive secretary, calls it the "Artillery"). For a good many years we had a few county units but now it is quite a different story—these groups have been formed in a great per cent of our counties. That this organization does exert a most beneficial effect cannot be doubted and now that far more than half the "medical wives" are officially interested in medicine we are expecting great things of them.

"Information Regarding the Prevention of Contagious Diseases" is the title of a pamphlet prepared by our Bureau of Publicity and the State Fair Committee for distribution at the Indiana State Fair next month. In a clear, concise presentation of a very worth-while subject, the Bureau offers some valuable advice to the citizens of the Hoosier State. The Indiana State Medical Association has for several years had an exhibit at the State Fair which is visited by increasing crowds as the years go by. Much information of great value regarding health matters is given out at the exhibit each year.

A little more than two months hence Indiana medical headquarters will move to French Lick for a three-day period. Some fifteen hundred Indiana physicians will be in attendance, together with divers members of their families. The hotel folk report that reservations are being made at a rapid rate, but of course they have plenty of room for everybody. However, some rooms are more to be desired than others, and you know about that early bird stuff. As we have before said, one can go to French Lick and just sit; one may enjoy sports of every variety to pass the hours; one may sit in scientific sessions until thoroughly sated; one may spend hours, and profitable, too, in the commercial exhibits. So, if you are not already set, better take it up with the Missus and make your plans for the finest little vacation trip one can have. (Just in case you do not remember—French Lick, October 29, 30, 31.)

The Indianapolis *News* editorially comments on the Indiana State Medical Association at the New York session of the American Medical Association thus:

INDIANA MEDICS LEAD

> The alacrity and enthusiasm with which the American Medical Association adopted at its New York convention a plan originating in Indiana is a tribute to the farsightedness and patriotism of Hoosier physicians and surgeons. A resolution calling for the perfection of a program that would enable the medical profession to mobilize quickly in the event of national need was adopted at the meeting of the Indiana State Medical Association in Ft. Wayne last fall. A committee worked out the details and has been functioning since the first of the year. The A.M.A.'s house of delegates adopted the proposal with special reference to Indiana's foresight in preparing for national emergencies. Approval of the plan carried a well-deserved tribute to Indiana's physicians.

In passing we wish to make the observation that the Indiana press is inordinately good to Hoosier Medicine. Be it an Indianapolis paper, one from the larger cities over the state, or just a plain, old-fashioned country newspaper, they all are our friends, and we *do* appreciate it.

Early reports are to the effect that Indiana's anti-fireworks law proved to be successful, but few reports of injuries from this cause have come to our attention. We have heard comments from several communities down state to the effect that the Fourth was a very quiet day. As was to be expected, however, residents immediately adjacent to other states managed to violate the law to some extent by purchasing fireworks "across the line" and shooting them in Indiana. Several such violations occurred in Lake County and reports are to the effect that many Hoosiers along the Kentucky boundary could not refrain from making a few such purchases, notably in and around Evansville. By a peculiar quirk of Old Man River, a portion of land once in Kentucky found itself located in Indiana. Since Kentucky controls all the Ohio River, this land geographically located in Indiana belongs to Kentucky, and Kentucky has no restrictions as to the sale of such truck—well, there you are!

Indianapolis is fortunate in having Toner Overley as the active officer of its Better Business Bureau. Recently he conducted a personal investigation of one "Dr." Hiel Eugene Crum who practices as a chiropractor, naturopath, and electrotherapist. As a result of his investigations, Mr. Overley has asked the State Board of Medical Registration and Examination to revoke the licenses which Mr. Crum holds; he asserts that Crum was engaged in a practice of medicine inimical to the public health and welfare, and he cited instances to prove the point, one being of a woman who was told by Crum that he could cure cancer as easily as a cold! It remains to be seen what action the State Board will take in regard to Crum's licenses. Another of Indiana's questionable practitioners, "Dr." Harold Davis of Indianapolis, and his assistant, Roy D. Poer, each were fined $50 in the Wayne circuit court on charges of practicing medicine without a license. According to the newspaper, the men gave treatments with a machine which they said could analyze body ailments.

The *New Republic* (June 17th issue) editorially asks the question, "What Are Eyeglasses Worth?" It refers to a report that Thurman Arnold—remember him?—has cracked down on certain manufacturers of spectacle frames and lenses, declaring that they are guilty of price fixing, etc. The magazine suggests that glasses which cost the purchaser about twenty dollars should be sold for something like seven dollars and fifty cents. It is true that in the optical trade there are a few items, such as special lenses and special frames, which are in some measure price-controlled; the facts are that these comprise but a very small per cent of such materials. Actually, the prices charged for glasses are extremely variable. At present there are at least five qualities of lenses being prescribed throughout the country; one Midwest manufacturer

lists at least this number of prices for bifocal lenses. There is a vast difference in the services of the person who writes the prescription. It is much like the tailoring business. Two tailors may use the same piece of woollen material but may vary greatly in the price charged for their finished product. While we hold no brief for this restricted price business, we do maintain that the competent refractionist is entitled to the proper fee for his services. We sometimes wonder just how far Mr. Arnold plans to go in his effort to disrupt American business and American professions!

Medicine is not a business. Neither is organized medicine a trade union. Physicians are not selling commodities with other merchants. Medicine is the profession of healing. It is the healing of ills of the human body. Each body has its own peculiar idiosyncrasies. You cannot pipe medicine to the community as you do steam, neither is it possible to hand out healing in a mass basis and expect proper results. There are two distinct fundamental issues involved in the current action of the Department of Justice against the American Medical Association for alleged "restraint of trade." One involves the future of medical care in the United States, and it concerns physicians as physicians and the public as patients. The question is essentially this: Shall the medical profession be permitted to maintain professional standards in medical practice for the benefit of the patients, or shall that professional control be destroyed, so that medicine may be operated for the benefit of politicians. Organized medicine has always believed that its right to discipline its own members was just as unimpeachable as the right of trade unions to discipline theirs. The American Medical Association is no more a trust or a combination in restraint of trade than is the American Bar Association, or the National Organization of Architects, or indeed, the American Federation of Labor, all of which have prescribed rigid rules of practice.

—Editorial, *Illinois Medical Journal*, July, 1940.

Further Observations on Sulfanilamide. Medical literature has been replete with many considerations of sulfanilamide. Its effectiveness and its dangers have, of course, been given the greatest space. Among the warnings, most has been said about its effect upon the blood and we all know that in the presence of cyanosis its administration should be stopped; better yet, daily blood examinations during administration provide a greater safety. But the doctors at large, who are using it more or less empirically knowing that streptococci are omnipresent, are increasing their respect for its potential dangers. They note the reports of dizziness, nausea, tingling, and indescribable physical sensations. Why one or a combination of these appears in some patients and not in others is debatable—and will be until the mechanism of their production is understood. We could not expect to explain these facts before the drug's mode of action is determined.

Pending such determinations, our care in the use of sulfanilamide must remain guarded. Studies made at the Johns Hopkins Hospital confirm this admonition, particularly regarding its possible effect upon a fetus or unborn child. Abundant study upon the development and growth of children born of mothers given extensive sulfanilamide treatment during pregnancy is urged.

None can deny that the value of this drug far exceeds its dangers, but our profession seems to be judged by its relatively few demerits. Loss of one life derives unforgiving censure; saving one hundred thousand is accepted for granted. This human trait will probably never change. But until it does, let us accept our progress with humility and use our new weapons in full respect of possible dangers as well as therapeutic effectiveness.

—*Rocky Mountain Medical Journal*, July, 1940.

Editor Hargrave, of the Rockville *Republican*, writes entertainingly of the anti-fireworks law that became effective in Indiana last August. He is very much in favor of the accident prevention that resulted from the restricted use of fireworks this year, yet laments the passing of a custom that had prevailed for a good many decades, that of a noisy Fourth:

> It was the lamented Will Rogers who used to say something like this: "I don't know anything but what I see in the papers." Were he living now he would be obliged to add, "or hear over the radio," for that magic machine is far more in evidence than when he was alive. So applying the same rule, I see by the papers and hear over the radio that the Fourth of July, 1940, recorded only two deaths in Indiana on that day due to fireworks and only a few were injured, mainly by slight burns. This, if true, must be the record for there had been an increasing list of fatalities for many years. Deaths thruout the nation from all causes, early reports show, totaled 164. It was the quietest Fourth I have known since I returned to Rockville over 50 years ago. It seemed like an ordinary Sunday. In the past few years the sale of firecrackers and other noise-making devices began about a week before and most any time, day or night, one's ears were assailed by the sudden explosion of a giant firecracker, a dynamite bomb, torpedo or something of the sort. Some of these things are dangerous and always some children and adults too, were at least injured. A good many states, including Indiana, have forbidden the sale of these risky noise-makers, and the small boy is deprived of what he considered one of the joys of life—to make a big noise on the Fourth. I wouldn't object to the firecrackers and fireworks if confined to one day only. Inspiring the notion of Yankee Doodle in the small boy is a wholesome thing for Young America, I believe, and if the law is enforced the small boy of the coming years will miss something that many older folks now look back to with pleasant memories.

President's Page

TAKE A VACATION

Now that we have our national conventions out of the way we may have a few brief weeks to recuperate and enjoy ourselves, and since we have a Democrat running for President on the Republican ticket and a Republican on the Democratic ticket for Vice-President plus a considerable sprinkling of Republican members of the present cabinet, we can all relax and listen or not as we wish to the probable vituperative campaigns we shall hear over the radio in the ensuing months.

It is my belief that the one is neither the public utility promoter, the representative of wealth and greed that he may be pictured, nor that the other is the Gila monster that would destroy all wealth or private enterprise as he may be represented. It is also my belief that regardless of which party is placed in command of our federal government there will be little change in our social and economic set up, and from the medical point of view there will be little to be gained or lost. As against the Wagner Health Bill we have the Lodge Bill, probably inspired by Dr. Hugh Cabot, and the Capper-Epstein Bill, sponsored by Senator Capper, one of the most influential Republicans in the Senate. So let's relax and consider a vacation.

In the medical profession, the same as in any other business or profession, the old adage "All work and no play makes Jack a dull boy" well applies. There are few vocations that so rigidly demand of the individual twenty-four-hour, three-hundred-and-sixty-five-day service as does the practice of medicine.

When we stop to consider how little real relaxation is permitted the average physician, how he is brought in from the golf course, called away from his bridge game, his reading or his evening with friends, until the jingle of the telephone becomes a veritable nightmare, it is small wonder that coronary disease, nephritis, and hypertension levy such heavy toll on our profession. There are many factors extrinsic to the actual practice of medicine that must occupy our leisure time and generally disturb our peace of mind. The multiplicity of scientific meetings, the voluminous literature, and the feeling of a need for constant graduate study all contribute to one or the other.

To be of the best service to his patients, the physician needs to play—a couple of weeks once or twice a year—to be away from all business and professional cares, to get out into the open, to fish, to play golf, to travel, to get acquainted with his family, to meet new friends and to get a complete slant on the other side of life.

It is typically American to plan for some kind of vacation. This is generally understood and fully appreciated by all large business concerns. They realize that their employees are of better service to them if granted a few weeks away from regular routine. It serves as a general tonic and pays its dividends in the nature of better service. In this manner it becomes an investment.

There are too many in our own profession who set the vacation idea aside with the dismissing thought of "I just can't take the time away from my practice," or "There are some cases I can't afford to leave," but I am firmly convinced we are in error in such deductions. Remember that we of the medical profession need the outdoor "tonic," the "relaxation," the same as folks in other lines of work; remember that there is never a "convenient" time, and that a visit to a clinic or medical convention doesn't fill the bill.

As I am writing this, Herr Hitler *with his fine consideration of the rights of others, his honorable sense of mercy and justice,* has just offered England a peace which, if accepted, is the prelude to entire confiscation of the empire and the navy that has done so much to promote our national security. Should England accept such a peace or should her navy be captured in actual combat, the effect upon our country could be disastrous in its implications.

At any rate this country must prepare for adequate defense as rapidly as possible. There will certainly be a conscription law passed immediately. There must be fifteen thousand physicians to supplement our present army medical staff, to care for a defense army of two million men. The medical profession in Indiana was the first in the nation to offer its full support. We shall not lag behind now or in the future.

The thought of a vacation, soon, is well worth your consideration.

Karl R. Ruckell

UNDER THE CAPITOL DOME

At a meeting in late August the State Board of Medical Registration and Examination will grant licenses to successful candidates who took the state board's examination last June. Work of grading the examination of the applicants has been under way some time.

DR. SKOBBA MADE SUPERINTENDENT AT BUTLERVILLE COLONY



Dr. Joseph S. Skobba, for several years clinical director of the Central State Hospital in Indianapolis, has been appointed superintendent of the Muscatatuck State Colony for feebleminded at Butlerville. The appointment is effective August first. Dr. Skobba is a diplomate of the American Board of Psychiatry and Neurology. Prior to his connection with Central State Hospital, he spent several years as senior physician at the Fort Wayne State School for feeble-minded youth.

Dr. George Denny, who has been superintendent at the Butlerville institution since 1937, has resigned because of impaired health and will return to his home in Madison.

ROCKY MOUNTAIN SPOTTED FEVER

Only four cases of Rocky Mountain spotted fever have been brought to the attention of the Indiana State Board of Health thus far during the year, Dr. Verne K. Harvey, secretary, has announced. Last year there were fifteen cases during the year. Three cases reported this year were south of the National road, and one north. Three adults and one child have been affected. There have been no deaths.

The small number of cases has occurred despite the fact that ticks are unusually prevalent, Dr. Harvey said.

Preventive measures are advocated by the health department. These include wearing of protective covering over the legs when out in the woods or other places where ticks are likely to be found, and frequent checks of the body to determine whether any have attached themselves.

KALAL AND CODY LICENSES REVOKED

Licenses of two physicians were revoked by the State Board of Medical Registration and Examination at a meeting July 9. One was Dr. Elmer J. Kalal, who is serving a sentence in the Federal penitentiary at Leavenworth for alleged violation of the Federal narcotics laws; he was chief surgeon at the Indiana Reformatory at Pendleton at the time of the alleged violations. The other was Dr. Burtis L. Cody of Evansville who is serving a one to ten year sentence in the Indiana State Prison on a felony conviction.

The board denied the petition of Dr. Ezra H. Pleak of Evansville for re-instatement of his license which was revoked in 1929 following his conviction on a felony charge.

"DOG DAYS" ARE NOT AUGUST DAYS

In the popular imagination, rabies is most prevalent, dogs most in danger of contracting the diseases, and people most in danger during August. This has been the idea for many years. Dr. Verne K. Harvey, secretary of the Indiana State Board of Health, points out that the popular idea is entirely wrong. "Dog days" aren't what they are supposed to be. In fact, by this time the worst is over for this year. A study of rabies cases conducted by Dr. Harvey showed that the real "dog days" come much earlier. The peak of treatments by patients bitten by mad dogs occurred in June, the study showed. The largest number of heads of rabid dogs are brought to the health department during May and June. Dr. Harvey said that his theory is that rabies is spread during the spring rutting season. Large numbers of dogs congregate during this period and they frequently travel considerable distances from their homes. Dog fights are common and animals frequently are injured by rabid dogs, thus spreading the disease.

ABSTRACT

CASE OF RUPTURE OF LACTEALS

An unusual case of rupture of one of the intestinal lymphatic glands (the lacteals, which take up the milky fluid called chyle from food after its digestion) is presented in *The Journal of the American Medical Association* for June 8 by Roland L. Maier, M.D., New York, who believes that this is the first acute case to be reported. His patient was perfectly well before the attack.

The attack consisted of severe abdominal pain. The patient was hospitalized and operated on. The preoperative diagnosis was perforation of the intestinal tract. When the abdomen was opened the lacteals were prominent and distended. Some chyle was spilled into the cavity. Observation at operation, Dr. Maier states, "suggests that there was a rupture of one of the lacteals caused by obstruction of the duct that collects chyle, with back pressure on the smaller lacteals. Whether or not the condition will recur remains to be seen, but to date the patient has had no symptoms."

BE SURE TO READ THE
SPECIAL "MEDICAL PREPAREDNESS"
NUMBER IN SEPTEMBER.

Deaths

John Irvin Maris, M.D., of Paoli, died July fifteenth, aged sixty years. Dr. Maris died of a heart attack while on a fishing trip. Dr. Maris graduated from the Hospital College of Medicine, Louisville, in 1903, and began his practice at Paoli soon afterward. He served in the medical corps during the World War. He was a member of the Orange County Medical Society, the Indiana State Medical Association, and the American Medical Association.

* * *

Russell Smith Clymer, M.D., of Andrews, died July fifteenth in an Indianapolis hospital. His death resulted from injuries received in an automobile accident near Warsaw, July tenth. Dr. Clymer graduated from Indiana University School of Medicine, Bloomington and Indianapolis, in 1928.

* * *

John G. Wishard, M.D., of Wooster, Ohio, cousin of Dr. William N. Wishard of Indianapolis, and native of Danville, Indiana, died July fifteenth, aged seventy-seven years. Dr. Wishard graduated from Indiana Medical College in 1888 and later accepted a Presbyterian board of foreign missions post in Mosul, Turkey. He accepted the post of superintendent of the American Missions Hospital in Persia in 1889 and served in that capacity for twenty years, after which he returned and lived in Wooster, Ohio. He also served as correspondent for American publications for many years, and wrote two books—"Twenty Years in Persia," and "Reminiscences of a Doctor."

* * *

Boston H. B. Grayston, M.D., aged ninety years and a resident of Huntington, Indiana, all except the first six months of his life, died June nineteenth at his home there. Dr. Grayston graduated from Northwestern University School of Medicine, Chicago, in 1875. Dr. Grayston was an honorary and life member of the Huntington County Medical Society and he had been an honorary member of the Indiana State Medical Association since 1933. He had served as secretary of the city board of health and for twenty-eight years was surgeon for the Erie railroad company.

* * *

George Gordon Griffith, M.D., of Spurgeon, died July third, after a short illness. He was fifty-one years old. Dr. Griffith graduated from the University of Louisville School of Medicine in 1913 and at once began the practice of medicine. In 1928 he located in Spurgeon where he remained. He was a member of the Pike County Medical Society, the Indiana State Medical Association, and the American Medical Association.

News Notes

Miss Dorothy Means and Dr. Benjamin N. Searcy, of Rising Sun, were married in Lawrenceburg, June ninth.

Dr. Edward Dierolf of Milwaukee, who recently completed his internship at Gary Mercy Hospital, has been appointed staff physician at Parramore Sanitarium in Lake County, to succeed Dr. Walter Mayne who resigned.

Dr. L. H. Ellis has begun the practiec of medicine in Lebanon. He recently completed his residency at St. Francis Hospital in Beech Grove.

Dr. and Mrs. Ralph Dreyer have moved from Carthage to Knightstown where Dr. Dreyer has taken over the practiec of Dr. L. E. Jolly who has gone East.

Dr. Franklin Rudolph, of Hammond, and Miss Alene Bowman, of Indianapolis, will be married August third. Miss Bowman is the daughter of Dr. and Mrs. I. E. Bowman of Odon, Ind. Dr. Rudolph is associated in practice with Dr. P. Q. Row of Hammond.

Dr. James M. Topolgus has announced the opening of his office at 312 North Walnut Street, Bloomington.

Dr. Voris McFall has opened an office at 114 East Church Street, in Alexandria, for medical practice. He recently completed his internship at Ball Memorial Hospital in Muncie.

Dr. Edwin Bailey will engage in the general practice of medicine and surgery in the offices of Dr. Ben Raney at Linton.

Dr. Floyd T. Romberger, Jr., of Lafayette, has gone to South Bend where he will be resident physician at Epworth Hospital. Dr. Romberger recently completed two years of work at Johns Hopkins Hospital in Baltimore and the Boston Lying-In Hospital in Boston.

Dr. and Mrs. William R. Tipton have gone to Greencastle where they will make their home and where Dr. Tipton has begun the practice of medicine. Dr. Tipton recently completed his internship in Indianapolis at the University hospitals and the City Hospital.

Dr. Jack E. Shields is associated in practice with Dr. Neal Matlock at Medora. Dr. and Mrs. Shields reside in Brownstown.

Miss Katherine Charlotte Weiss, of Indianapolis, and Dr. David F. Stone, of Indianapolis, were married in Indianapolis, June twenty-eighth.

Miss Martha Louise Banister, daughter of Dr. and Mrs. Ray Banister of Columbus, and Dr. Marvin R. Davis of Letts, were married July sixth, in Columbus.

Miss Betty Lou Etnire, of Logansport, and Dr. William B. Lybrook, of Young America, were married June twenty-fifth in Logansport. Dr. and Mrs. Lybrook will reside in Indianapolis.

Dr. John Burgin, formerly of Louisville, has moved to Advance, Indiana, where he will practice medicine. Dr. Burgin comes to Advance from Washington, D.C., where he has completed his work at the U.S. army hospital.

Miss Gwendolyne Hillis, of Terre Haute, and Dr. Dan D. Stiver, of Goshen, were married in Indianapolis, June twenty-first. Dr. Stiver will open an office in South Bend in the fall.

Dr. J. H. Hewitt, who has managed and directed the Mudlavia Sanitarium near Kramer for the past five years, has leased the Mudlavia property for a period of four years.

Dr. E. L. Pollock has moved from Winslow to Vincennes, where he will practice medicine.

Dr. L. A. Ensminger, of Indianapolis, has been reappointed as a member of the Indianapolis Board of Health of which he has been a member since 1932. The new term is for four years.

Dr. Raymond C. Beeler, of Indianapolis, was elected chairman of the Radiology Section of the American Medical Association at the New York meeting in June.

The sixty-ninth annual meeting of the American Public Health Association will be held in Detroit, Michigan, October 8-11, 1940. The Book-Cadillac Hotel will be headquarters.

The 1940 Graduate Fortnight of the New York Academy of Medicine will be held from October 14 to 25, 1940. The subject of this year's Fortnight is "Infections." The purpose of the Fortnight is to make a complete study and authoritative presentation of a subject of outstanding importance in the practice of medicine and surgery. All members of the medical profession are eligible for registration. A complete program and registration blank may be secured by addressing Dr. Mahlon Ashford, The New York Academy of Medicine, 2 East 103rd Street, New York City.

Dr. C. B. Harris has opened an office at 754 Bankers Trust Building, Indianapolis, for the practice of ophthalmology.

The American Academy of Ophthalmology and Otolaryngology will hold its forty-fifth annual convention in Cleveland, October 6 to 11, with headquarters at the Hotel Cleveland. Immediately following the Academy meeting, there will be a Pan-American Congress of Ophthalmology, October 11 and 12, which eye specialists from all the Latin American countries are expected to attend.

Miss Irene Mary Kubik and Dr. Gale H. Troutwine, of Michigan City, were married July twenty-seventh. Dr. and Mrs. Troutwine will make their home in Middlebury, where Dr. Troutwine will conduct a general practice.

Dr. Loren H. Martin is associated in practice with Dr. E. T. Gaddy of Indianapolis at 2602 West Washington Street.

Dr. Richard Estlick, of Columbia City, has begun private practice in Fort Wayne following the completion of his residency at the Indiana University medical center.

Dr. Robert W. Kepler has opened an office in LaPorte where he will practice medicine. He has recently completed his internship at the Indiana University hospitals in Indianapolis.

Mr. Robert L. Craft, son of Dr. Kenneth Craft, has been appointed Indiana agent for Maico hearing aids in Indianapolis.

Dr. Wesley C. Ward has announced the opening of offices for the general practice of medicine at 116 East Forty-ninth Street, Indianapolis.

Leonard W. Brown, M.D., medical examiner for the Pennsylvania Railroad Company for more than thirty-four years, retired from active service on May first. During his years of service, Dr. Brown spent fourteen years in Cleveland, six years in Grand Rapids, nine years in Fort Wayne, and the past five and one-half years in Indianapolis where he and Mrs. Brown will continue to make their home at 5249 East St. Joseph Street.

CORRECTION

In the list of attendants at the meeting of the American Medical Association in New York, published in the July JOURNAL (page 377), the name of Dr. D. L. McAuliffe, of North Vernon, was inadvertently omitted. Dr. McAuliffe registered at the meeting on Tuesday, June eleventh.

ANNOUNCEMENT OF A STUDY TO EVALUATE ORIGINAL SEROLOGIC TESTS FOR SYPHILIS

More than five years ago the Committee on Evaluation of Serodiagnostic Tests for Syphilis, in cooperation with the United States Public Health Service, conducted a study to evaluate original serologic tests for syphilis or modifications thereof in the United States. The results of this study were published shortly after the investigation was completed.[1]

Consideration is now being given by the Committee to the organization of a second evaluation study of original serologic tests for syphilis or modifications thereof within the next year. If the need for an investigation of this kind seems to justify the cost, invitations will be extended to the authors of such serologic tests who reside in the United States, or who may be able to participate by the designation of a serologist who will represent them in this country. The second evaluation study will be conducted utilizing methods comparable to those employed in the first study.[2]

Serologists who have an original serologic test for syphilis or an original modification thereof and who desire to participate in the second evaluation study should submit their applications not later than October 1, 1940. The applications must be accompanied by a complete description of the technic of the author's serologic test or modification. All correspondence should be directed to the Surgeon General, United States Public Health Service, Washington, D.C.

[1] Ven. Dis. Inform., Washington. June, 1935, 16:189. J.A.M.A., Chicago. June 8, 1935, 104:2083.
[2] J.A.M.A., Chicago. Dec. 1, 1934, 103:1705.

REPRODUCTIONS OF CORNWELL'S PAINTING AVAILABLE TO PHYSICIANS



"Osler at Old Blockley," a painting in oil by Dean Cornwell, was unveiled at the dedication of the Osler Memorial Building on the grounds of the Philadelphia General Hospital this past June and was later exhibited at the American Medical Association convention in New York.

The painting depicts one of Osler's outstanding contributions to medicine, namely, bringing medical students to the bedside of the patient for clinical study. In the painting Osler is shown at the side of an elderly patient on the hospital grounds. Surrounding Osler and the patient are internes who have stopped with him as they were on their way to the autopsy house to observe one of his famous post mortems. This autopsy house, now the only Osler Memorial Building in the United States, is shown in the background. This memorial was made possible by a grant from John Wyeth & Brother.

"Osler at Old Blockley" is the second painting in the series "Pioneers of American Medicine" sponsored by John Wyeth & Brother as part of a project to highlight the contributions of Americans to the advancement of medicine. "Beaumont and St. Martin" was the first painting in the series.

Colored reproductions of "Osler at Old Blockley," suitable for framing, may be obtained free by addressing requests to THE JOURNAL, 1021 Hume Mansur Building, Indianapolis.

PHYSICIANS NEEDED FOR ARMY SERVICE

The physician, like every other American, has become actively interested in our national security and stands ready to contribute his services as required for military preparedness.

The immediate problem in this connection is one that concerns the War Department, and primarily the young physician. The War Department must procure sufficient additional personnel from the medical profession to augment the medical services of the Regular Army as the various increases are made in the strength of the Regular Army, as authorized by Congress to meet the partial emergency. The young physician is especially concerned because it is usually advantageous, and is often more convenient for him to serve with the Army.

Present plans of the War Department are designed to make service attractive and instructive for the young physician. If the physician holds a Medical Corps Reserve commission he can be ordered to active duty if he so requests. If he does not hold a commission, but is under 35 years of age and is a comparatively recent graduate of an accredited school, he may secure an appointment in the Medical Corps Reserve for the purpose of obtaining extended active duty for a period of one year or longer. Duty is given at General Hospitals, Station Hospitals, and with Tactical Units, and embraces all fields of general and specialized medicine and surgery. Excellent post-graduate training is obtainable in connection with Aviation Medicine. After serving 6 months of active duty in the continental United States, a Reserve officer may request duty in Hawaii, Panama, or other United States territories and possessions. The initial period for duty is for one year and yearly extensions are obtainable thereafter until the international situation becomes more clarified and our domestic military program becomes stabilized.

Many young doctors who have served with the Army on extended active duty have taken the competitive examination for entrance into the Medical Corps of the Regular Army. Extended active duty affords an excellent opportunity for the physician to observe modern military medicine and the facilities that exist for a complete and comprehensive medical practice.

Pay is according to rank, and, including subsistence and quarters allowances for an officer with dependents, amounts to an annal sum of $3,905 for a Captain and $3,152 for a First Lieutenant; or, without dependents, to an annual sum of $3,450 for a Captain and $2,696 for a First Lieutenant. In addition, reimbursement is made for travel to duty station and return.

Further information may be obtained by writing to The Surgeon General, U. S. Army, Washington, D. C.

COUNTY MEDICAL SOCIETY HONORS DOCTOR MYERS



Dr. B. D. Myers

The Monroe County Medical Society arranged a dinner meeting in honor of Dr. B. D. Myers, retiring dean of Indiana University School of Medicine at Bloomington, July tenth, in the University Union Building. Approximately seventy members of the society, colleagues of Dr. Myers, leading Hoosier physicians and local civic leaders attended.

Dr. Myers has been dean of the School of Medicine at Bloomington since 1927. He first joined the faculty as professor of anatomy in 1903, became assistant dean in 1920, and dean at Bloomington in 1927. He relinquished his duties July first under the University's regular retirement plan which provides for retirement of faculty members upon their reaching seventy years of age.

Prominent members of the Indiana State Medical Association and out-of-state guests joined the Monroe County Society members in paying tribute to Doctor Myers. Among these were Dr. Karl Ruddell, president of the Indiana State Medical Association; President Herman B Wells, of Indiana University; Dr. William Lowe Bryan, president emeritus of Indiana University; Attorney George Henley, and Mr. Thomas A. Hendricks, executive secretary of the Indiana State Medical Association. Numerous other out-of-town guests were present.

Doctor Myers was presented with a life membership in the Monroe County Medical Society.

(Editorial comment concerning Dr. Myers' retirement appeared in the June issue of this JOURNAL.)

INDIANA UNIVERSITY NEWS

DR. GATCH NOW HEAD OF BOTH DIVISIONS OF MEDICAL SCHOOL



Dr. W. D. Gatch

Indiana University's medical training as provided on its campuses at Bloomington and Indianapolis will be directed after July 1 by Dr. W. D. Gatch, dean since 1931 of the University's School of Medicine at Indianapolis.

The new arrangement became effective with the retirement last month of Dean B. D. Myers, member of the University faculty for thirty-three years and head of the School of Medicine since 1927. Under the new arrangement, President H. B. Wells asserted, continuity of training at minimum of cost would be assured for students during their three years of pre-medical study and one year of medical work on the Bloomington campus and the three years of highly professional study at the Medical Center at Indianapolis.

The appointment of Dean Gatch as director of all medical training carries with it two other administrative designations announced by President Wells. Dr. J. A. Badertscher, professor of anatomy at Bloomington since 1921, is made assistant to Dean Gatch there, and Dr. Edwin N. Kime, who since 1916 has been a member of the Anatomy Department faculty of the Medical School's Indianapolis Division, will head that department on both campuses.

President Wells announced other appointments and changes in the School of Medicine as having been approved by the University's trustees:

Dr. Alois B. Graham, chairman of the division of gastro-enterology and professor of surgery to be professor emeritus of surgery;

Dr. Charles Eli Cottingham, associate in neurology and psychiatry to be associate emeritus in neurology and psychiatry;

Dr. Alexander T. Ross, assistant professor of neurology and psychiatry; Dr. Richard Marion Nay, instructor in general pathology; Dr. Carl Scott Culbertson, assistant in clinical pathology, and Dr. Joseph E. Tether, assistant to the medical director;

Dr. Joseph Warren Ricketts, clinical professor of surgery, to be chairman of the division of gastro-enterology, succeeding Dr. Graham; Dr. Hugh E. Martin, instructor in pharmacology to assistant professor of pharmacology; Dr. Jacob K. Berman, Dr. Robert L. Glass, Dr. Cleon A. Nafe and Dr. John E. Owen from assistant professors of surgery to associate professors of surgery; Dr. William V. Woods, from assistant in orthopedic surgery to assistant professor of orthopedic surgery; Dr. Harold M. Trusler, from assistant professor of surgery to associate professor of surgery;

Dr. Dennis S. Megenhardt, from assistant in plastic surgery to associate in plastic surgery; Dr. Carl P. Huber, from assistant professor of obstetrics to associate professor of obstetrics; Dr. Robert M. Dearmin, from associate in otolaryngology to assistant professor of otolaryngology; Dr. Bernard J. Larkin, from associate professor of ophthalmology to clinical professor of ophthalmology, and Dr. Arthur P. Echternact, from associate in radiology and acting roentgenologist to university hospitals to assistant professor of radiology and roentgenologist to university hospitals.

* * *

The final of a series of postgraduate courses at the Indiana University School of Medicine in Indianapolis was held June 24-29 with lectures, clinics and demonstrations confined to heart action and heart disease.

Two out-of-state speakers, Dr. Roy Wesley Scott of Cleveland, Ohio, and Dr. M. Herbert Barker of Evanston, Ill., were on the program.

Sponsored by the postgraduate education committee of the school for the benefit of practicing physicians, the course was the fourth of a series. The first was in obstetrics, the second in ear, nose and throat and the third was a week's general course in medicine and surgery.

* * *

Dr. Jack Courtney of Indianapolis, who received the doctor of medicine degree from Indiana University this year, was awarded the Ravdin medal in recognition of having the highest four-year average in the school of medicine.

* * *

Internships have been awarded as follows to graduates of this year's class at the Indiana University school of medicine:

Indiana University Hospitals of Indianapolis: Eugene Austin, Anderson; Robert Badertscher, Bloomington; Jene R. Bennett, Plymouth; George Brown, Greenwood; Wendell Covalt, Muncie; Richard E. Dukes, Dugger; James R. Fant, Indianapolis; Warren Fischer, Gary; Meredith Flanigan, Milltown; John J. Flick, Indianapolis; Anne Holovachka, Gary; Francis J. Kubik, Michigan City; Harry McClelland Jr., Indianapolis; Virgil McMahan, Bedford; Carl Martz, Anderson; Roland E. Miller, Plymouth; Charles W. Morris, Rockville; Joseph Mullin, Rockfield; John F. Spahr Jr., Huntington; John Stepleton, Vevay; Paul V. Thompson, Indianapolis; Clarence Worth, Indianapolis.

Indianapolis City Hospital: Basil K. Byrne, Georgetown; Joseph E. Ball, Indianapolis; Ernest R. Beaver, Rensselaer; Alvin Cohn, Seymour; Sam J. Davis, Brazil; Wallace Dyer, Evansville; Paul V. Evans, Indianapolis; Martin Garfinkel, Indianapolis; David Hadley Indianapolis; Bernard R. Hall, Walton; Emory Hamilton, Kendallville; Robert N. Kabel, Winchester; Julien Kennedy, Indianapolis; Knight L. Kissinger, Hamilton; Max R. Long, Marion; Clarence Lucas, Indianapolis; James Peirce Jr., Indianapolis; Charles Sage Jr., Brownstown; Jack Shrader, Indianapolis; Elsworth Stucky, Indianapolis; Fred L. Toumey, Ridgeville; Donald K. Winter, Logansport.

Methodist Hospital of Indianapolis: Harry D. Aldrich, Angola; Wilmot Boone, Indianapolis; Ray Burnikel, Evansville; Perry Campbell, Liberty; Herbert O. Chattin, Vincennes; Edwin R. Eaton, Indianapolis; Paul D. Eidson, Indianapolis; Edgar A. Garland, Indianapolis; Jerome A. Graf, Bloomfield; Arthur Jay, Indianapolis; James M. McIntyre, Indianapolis; Robert D. Miller, Nappanee; Robert Rang, Washington; W. Mitchell Taylor, Indianapolis.

St. Vincent's Hospital, Indianapolis: Leo F. Connoy, Indianapolis; E. M. Hoetzer, Fort Wayne; Sterling P. Hoffman Jr., Fort Wayne; Frederick Simmons, Goshen; William C. VanNess, Summitville.

Ball Memorial Hospital, Muncie: Basil Dulin, Bedford; Joseph Freeman, Syracuse; A. Lee Hickman Jr., Hammond; Robert W. Phares, Greentown.

Springfield (Ohio) City Hospital: Robert A. Clouse, Evansville; Ephraim Fosbrink, Vallonia.

Philadelphia (Pa.) General Hospital: Elbert Laws, Milan; Dale E. York, Bloomington.

Montefiore Hospital of Pittsburgh, Pa.: William Cohen, South Bend; Jacob Kline, Ligonier, Pa.

St. Mary's Hospital of Detroit, Mich.: S. Phillip Grillo, Gary; Walter E. Pelczar, Hobart.

United States Public Health Service: James Hendley, Summitville; Dean B. Jackson, Angola; Linden Johnson, Newtown; George Jewell, Indianapolis.

Other appointments are as follows: William Ballou, Fort Wayne, Vancouver General Hospital, Vancouver, B. C.; Nathan Bander, Ellenville, N. Y., Harlem City Hospital of New York City; William H. Davis Jr., Henry Ford Hospital, Detroit, Mich.; Paul G. Dintaman, Richmond, St. Mary's Group Hospitals, St. Louis, Mo.; John M. Engle, Winchester, St. Elizabeth Hospital, Dayton, Ohio; Daniel Hare, Evansville, Eloise Hospital, Eloise, Mich.; Carroll E. Kern, Lakewood, Ohio, Los Angeles County General Hospital; John Kitchel, Indianapolis, Lutheran Hospital, Fort Wayne; Kurt Klee, Indianapolis, Providence Hospital, Seattle, Wash.; Charles Champ McVaugh, Pendleton, New York Postgraduate Medical School and Hospital; Robert Maschmeyer, Indianapolis, Providence Hospital of Seattle, Wash.; Dwain Mings, Kokomo, State of Wisconsin General Hospital, Madison, Wis.; Leonard Morgretto, Pennville, St. Mary's Hospital of Saginaw, Mich.; Wyndham Nutter, Morristown, St. Mary's Hospital, Cincinnati, Ohio; Andrew Offutt, Spiceland, U. S. Army Letterman General Hospital of San Francisco, Cal.; Abraham Owen, Attica, St. Elizabeth Hospital of Lafayette; H. Lester Reed, St. Joseph's Hospital, Kansas City, Mo.; Joseph C. Reed, Rochester, Billing's Memorial Hospital, Chicago, Ill.; Robert Saide, Michigan City, Chicago Memorial Hospital; James Schornick, Wabash, Hospital of the University of Pennsylvania, Philadelphia; Harry Shorster,

Indianapolis, Columbia Hospital, Pittsburgh, Pa.; Everett Steele, Sullivan, Illinois Central Hospital, Chicago, Ill.; Glenn Swihart, Elkhart, Epworth Hospital, South Bend; Walter C. Twineham, Indianapolis, William Beaument General Hospital, El Paso, Texas; William Webb, Indianapolis, Army General Hospital, Fort Sam Houston, Texas.

* * *

The following resident physicians have been named for the Indiana University Hospitals for the present year: Felix Ballenger, Lubbock, Texas; Thomas B. Bauer, Lafayette; Harry Baum, Madison; Donald J. Caseley, Indianapolis; Carl S. Culbertson, Vevay; Herbert Egbert, Indianapolis; Richard Gery, Indianapolis; Bennett B. Harvey, Bloomington; Marietta Houston, Indianapolis; Samuel A. Manalan, Gary; William F. Montgomery, Plymouth; Mary Alice Norris, Indianapolis; Paul Rieth, Goshen; Robert Salassa, Logansport; Maynard C. Shiffer, Fort Wayne; Ben J. Siebenthal, Indianapolis; Henry Tanner, Indianapolis; Julius Travis, Indianapolis; Mary Frances Travis, Indianapolis; Robert McC. Vandiver, Indianapolis; Charles E. Walters, Mishawaka; Frank M. Warder, Glasgow, Kentucky; Ralph C. Wilmore, Indianapolis; James S. Battersby, East Chicago; Marvin F. Hall, Tingley, Iowa.

* * *

Faculty members and the administrative staff of the Indiana University School of Medicine, together with members of the medical profession in Indianapolis gave a dinner for Mark P. Helm, who July 1 retired as registrar of the School of Medicine. Mr. Helm, directly associated with the medical center since 1927 and an active alumnus of the university for 52 years, was praised by Dr. Herman B Wells, president of I.U.; Dr. H. T. Briscoe, dean of the faculties; Dr. W. D. Gatch, dean of the medical school; Mrs. Sanford Teter and J. Dwight Peterson, members of the board of trustees, and Taylor Groninger, attorney and friend of Mr. Helm for 50 years.

A desk and chair were presented to Mr. Helm by Dr. R. N. Harger, medical school toxicologist, as a gift from staff members of the medical school.

LECTURES ON PSYCHOLOGY

A series of twenty-six lectures on the psychology of the individual as applied to the nurse and the patient is being presented at Norways Sanatorium in Indianapolis. The course began July 15th. The series of lectures is intended to be preliminary to a proposed series of talks on psychiatric nursing to be given at the sanatorium in the fall. There is no registration fee for the preliminary course. Male or female nurses are eligible to attend. Interested persons may obtain detailed information by addressing Dr. P. B. Reed, 1820 East Tenth Street, Indianapolis.

PROFESSIONAL PROTECTION

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$5,000.00 ACCIDENTAL DEATH $25.00 weekly indemnity, accident and sickness	For $33.00 per year
$10,000.00 ACCIDENTAL DEATH $50.00 weekly indemnity, accident and sickness	For $66.00 per year
$15,000.00 ACCIDENTAL DEATH $75.00 weekly indemnity, accident and sickness	For $99.00 per year

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$1,850,000 INVESTED ASSETS
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$200,000 deposited with State of Nebraska for protection of our members

Disability need not be incurred in line of duty—benefits from the beginning day of disability.

Send for applications, Doctor, to

400 First National Bank Building Omaha, Nebraska

SOCIETIES AND INSTITUTIONS

Gibson County Medical Society met at the Emerson Hotel, Princeton, June tenth. Dr. Robert M. Moore, of Indianapolis, presented a paper on "The Heart at Middle Age." Twenty members were present.

* * *

Indianapolis (Marion County) Medical Society members were the guests of the Indiana University School of Medicine, June twenty-eighth, when Dr. M. Herbert Barker, of Chicago, was the guest speaker. This lecture was the last in a series in connection with a week's postgraduate course in heart disease.

* * *

Jay County Medical Society held a meeting June fourteenth at the new Jay County Hospital in Portland. Dr. P. D. Moore, of Muncie, lectured on "Value of X-Ray in the Diagnosis of Abdominal Ailments." His talk was illustrated with lantern slides.

* * *

LaPorte County Medical Society met June twentieth at the LaPorte Country Club. Speakers were Drs. Harry E. Mock, Charles E. Shannon, and John L. Lindquist, all of Chicago. They presented a symposium on "Lessons Learned During Seven Years With a Tumor Group." Thirty members were present.

* * *

Montgomery County Medical Society held a meeting at Culver Hospital, June twentieth. Dr. Karl Ruddell, of Indianapolis, led a round table discussion on "The National Physicians Committee and M-Day." Dr. Charles R. Bird, of Indianapolis, talked on "Preparedness." Fourteen members were present.

* * *

Pike, Daviess and Martin Counties held a joint meeting at the Old Settlers' Park at Odon, July second. Dinner was served by the ladies of the Christian Church, after which a business meeting was held. Dr. L. M. McNaughton, of Petersburg, read a paper written by Dr. L. R. Miller, of Winslow, entitled "The Care of the Pregnant Woman."

Plans were discussed concerning a clinical laboratory in connection with the Daviess County Hospital at Washington.

* * *

Randolph County Medical Society members met, June twenty-sixth, for the season's last regular meeting, at the Union City Country Club. The program started at 2 p. m. with golf. At 6 p. m. a dinner and business meeting were held. Dr. J. S. Robison, of Winchester, presented a paper on "Fractures of the Neck and Femur." Motion pictures accompanied the talk. The next regular meeting will be held in September at Winchester.

* * *

Tippecanoe County Medical Society members held their last meeting of the season, June twenty-fifth, at Lincoln Lodge, near Lafayette. Dr. Robert L. Glass, of Indianapolis, talked on "Herniation of the Intervertebral Disc." Thirty members were present.

The next meeting will be held September tenth.

* * *

Vanderburgh County Medical Society members and Tri-State physicians met in St. Mary's Hospital, May sixteenth, for a dinner given by the sisters and the staff of the hospital. Dr. A. R. Barnes of Rochester, Minnesota, spoke on "Treatment of Congestive Heart Failure."

* * *

Wayne-Union County Medical Society met June twentieth for a dinner meeting at Beard's Cafe, Liberty, Indiana. Following dinner, a business meeting was held. Approximately forty members were present.

INDIANA STATE BOARD OF HEALTH

BUREAU OF COMMUNICABLE DISEASES

MONTHLY REPORT, JUNE 1940

Diseases	*June 1940*	*May 1940*	*April 1940*	*June 1939*	*June 1938*
Tuberculosis	172	137	146	157	159
Chickenpox	208	248	309	133	150
Measles	77	57	105	33	898
Scarlet Fever	198	421	766	232	190
Smallpox	16	12	6	40	105
Typhoid Fever	19	17	9	16	23
Whooping Cough	137	115	135	258	72
Diphtheria	13	14	16	19	38
Influenza	25	18	72	14	13
Pneumonia	55	81	59	26	53
Mumps	205	624	552	92	52
Poliomyelitis	2	0	0	2	0
Meningitis	7	2	5	2	3
Trachoma	2	1	2	0	4
Tetanus	2	0	0	0	0
Rocky Mountain Spotted Fever	2	0	0	3	0
Tularemia	2	0	0	0	2
Undulant Fever	13	4	4	5	3

EIGHTH DISTRICT MEDICAL SOCIETY

The annual meeting of the Eighth Councilor District Medical Society of the Indiana State Medical Association was held in Elwood, at the Country Club, June 19, 1940.

The meeting came to order at 2:00 p. m. with Dr. Lall G. Montgomery, the president, in charge. The first speaker was Dr. Guy Owsley of Hartford City who spoke on "Diagnostic Helps in Allergy." Drs. L. G. Montgomery and W. S. Miley discussed the paper.

SILVER PICRATE

Wyeth

HAS SHOWN A CONVINCING RECORD* OF EFFECTIVENESS IN ACUTE ANTERIOR URETHRITIS

due to Neisseria gonorrheae • Trichomonas vaginalis Monilia albicans

Silver Picrate is a crystalline compound of silver in definite chemical combination with picric acid. Dosage form for use in anterior urethritis: Wyeth's Silver Picrate Crystals in an aqueous solution of 0.5 percent.

Supplied at all pharmacies in vials of 2 grams

Complete literature on Silver Picrate as used in genitourinary and gynecological practice will be mailed on request.

*"Treatment of Acute Anterior Urethritis with Silver Picrate," Knight and Shelanski, AMERICAN JOURNAL OF SYPHILIS, GONORRHEA AND VENEREAL DISEASES, Vol. 23, No. 2, pages 201-206, March, 1939.

JOHN WYETH & BROTHER, INCORPORATED, PHILADELPHIA, PA.

Dr. Bruce W. Stocking of Muncie spoke on "X-Ray Diagnosis in Abdominal Diseases."

After an intermission, Dr. George C. Stevens, director of the Division of Medical Care of the Indiana State Department of Public Welfare was introduced, and he spoke on "The Mental Hygiene Clinic and the Physician."

The next speaker was Dr. E. Rogers Smith of Indianapolis who presented a paper on "The Use of Metrazol in Certain Mental Diseases." Moving pictures were shown in conjunction with Dr. Smith's paper.

Dr. John C. Drake of Anderson presented a paper on "Recent Advances in Treatment of Fractures of the Hip." This paper was illustrated with lantern slides.

The last scientific paper was given by Dr. W. D. Gatch, dean of the Indiana University School of Medicine, whose subject was "Cause and Treatment of Symptoms of Peritonitis."

A business meeting was held following the scientific program. Minutes of the last meeting were read and accepted by the society. The financial report was read and accepted. An invitation was presented by Dr. V. K. Stoelting of Winchester to hold the 1941 meeting there, and it was moved and passed that the invitation be accepted.

Officers for the next year are Dr. J. S. Robison, Winchester, president, and Dr. V. K. Stoelting, secretary-treasurer.

A chicken dinner was served at the Country Club, and following the dinner, Dr. Karl Ruddell, president of the Indiana State Medical Association, spoke briefly. Mr. Thomas Hendricks, executive secretary of the Indiana State Medical Association, told of the A.M.A. meeting in New York City. Dr. M. A. Austin of Anderson, councilor for the district, also spoke briefly.

Dr. W. M. Miley made a motion that the Eighth District Medical Society present Dr. M. A. Austin as a candidate for president of the Indiana State Medical Association at the French Lick meeting in October. The motion was seconded by Dr. Clay Ball of Muncie and passed unanimously.

The final address of the day was made by Mr. Albert Stump, of Indianapolis, whose subject was "Legal Problems in Care of Indigents."

S. W. Litzenberger, M.D., *Secretary.*

BOOKS

Books Received

DERMATOLOGIC THERAPY IN GENERAL PRACTICE. By Marion B. Sulzberger, M.D., Assistant Clinical Professor of Dermatology and Syphilology, Skin and Cancer Unit of the New York Postgraduate Medical School and Hospital of Columbia University; and Jack Wolf, M.D., attending dermatologist and Syphilologist, Skin and Cancer Unit of the New

York Postgraduate Medical School and Hospital of Columbia University. 680 pages, illustrated. Cloth. The Yearbook Publishers, Chicago, 1940.

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RATIONAL CONTRIBUTION TO NATIONAL DEFENSE BY THE MEDICAL PROFESSION

ELMER F. STRAUB
The Adjutant General
State of Indiana

Under the National Defense Act, approved June 3, 1916, as amended to date, there has been given a broader opportunity to those citizens who have been so inclined to participate in the military or semi-military life of this nation. Underlying every advantage which the United States can claim over any potential enemy has been the physical fitness and well being of those who partook of these opportunities to serve in a military capacity. This same is also true of those who remained in a pure civilian status in that the general rise in the health quotient of everyone denoted definitely that prospects for physically qualified volunteers would increase in number.

The organized peace establishment, including the Regular Army, the National Guard, and the Organized Reserves, shall, in accordance with the National Defense Act, include all of those divisions and other military organizations for the national defense in the event of a national emergency declared by Congress.

How many kinds of emergency are included? Today there is an epidemic of belligerency which is gradually spreading to more and more nations. It has been the responsibility of those men engaged in military pursuits to probe into the best methods to combat this ever menacing aggressor, war. It has been the responsibility of those in high positions as heads of the many departments of our government to analyze the causes of such conditions and recommend to the people the procedure which should be adopted to constitute a cure. It is too late to speak of a prevention, since the growth has reached mammoth proportions throughout our world. Localizing possibilities seem insignificant.

Preventative measures successfully applied create worthwhile endeavors that everyone can recognize. In this field we find where the medical profession has increased in power from year to year. The word "contagion" when spoken will give to different people a different meaning. Something good that is contagious is to be cultivated and stimulated. Something disastrous is to be fought with every tool at one's command to prevent spreading. Those engaged in the medical profession are entitled to high praise for their progress in dealing with all types of physically disqualifying, contagious diseases which, if ignored, could and would create a disaster more potent and destructive than any invading enemy force. Through the ever effective weapons used by our medical men, either singly or as members of a staff, we find today a country vastly free from those disabling and disheartening epidemics which can take such a tremendous toll of human life.

What is the difference in destructive epidemics? Probably only that which is governed by the direction from which it is viewed. The final answer is ever saddening to those who are living in affected areas. War, sabotage, revolution, distrust, or disease, the consequences are the same when the proportions of an epidemic are reached.

What does National Defense mean today? It means preparedness against an enemy, whose identity is yet unknown, and must consist of full cooperation of all agencies in the nation. Coordination of effort in every endeavor of our industrial, agricultural, labor, business and professional groups will insure for us a bulwark of tremendous and everlasting strength so long as that coordination exists. The present officers of the Medical Corps in the armed forces have long ago realized this fact and have, through their unselfish contributions to the military and naval establishments, shown outstanding devotion to the cause of a broad national defense.

Approximately ten percent (10%) of the officer personnel of the National Guard are medical

officers. The National Guard has been considered our first line of defense for years; consequently, this one profession has been the outstanding single source from which has come the physical demonstration of patriotic devotion.

Physical fitness of combat troops is mandatory. Good health of the civilian population is likewise important. For more formidable defense against an enemy aggressor which brings war, there is need for additional strength of Medical Officers in combat service. For each to make his contribution where he is best qualified to serve, whether with combat troops or with the civilian population, will be the essence of a constructive contribution to national defense by the medical profession.

The contagious spirit of mutual helpfulness will constitute an insurmountable bulwark against any epidemic of evil proportions. Thereby each contributor to the broad national plan will receive a just and satisfactory compensation for the part he played in the program of rational national defense.

EARLY TREATMENT OF GUNSHOT WOUNDS AND FRACTURES

H. WINNETT ORR, M.D.
LINCOLN, NEBRASKA

Recent reports from England indicate that wounded soldiers from Belgium and France arrived in better condition than similar convoys in 1914-1918. This is attributed, at least in part, to immediate immobilization in plaster-of-paris casts and after-care without frequent dressings. Several British writers have generously recognized my efforts in their adoption of this method. Since 1938 an application of my primary vaseline pack and plaster-of-paris cast method to wounds and fractures in war surgery was reported from the war in Spain. A report of this experience was brought directly to London by J. Trueta whose book described in detail his experiences as director of the military hospitals in Barcelona. Trueta treated more than 1,000 cases by the plaster-of-paris cast and infrequent-dressing method that I had described before the Association of Surgeons of Great Britain in 1930[1] and before the British Medical Association in Dublin in 1933.[2] Trueta's results (6 deaths in 1,073 cases) were far better than any previously reported for similar fractures and wounds incidental to military activities.

I have pointed out on many occasions during the past 17 years that results in compound fractures have been poor for two principal reasons: Surgeons have been too much preoccupied with the treatment of the infected wound instead of the fracture, and also end-to-end approximation of fractured bone fragments has been the objective of primary treatment whereas we should try to place all the parts of an injured limb in correct position for healing, for defense against infection, and for ultimate recovery without disability or deformity.

Our experience during the war of 1914-1918 should have led us much more rapidly than it did to an appreciation of the value of correct primary care for gunshot and other open fractures. Sir Robert Jones was the first to call our attention to the importance of dealing with compound fractures on a large scale by splinting patients on the battlefield or at the point where their injuries were sustained. Sir Robert pointed out the importance of obtaining full length by traction in an emergency splint and of restoring contour to the injured extremities. The very great reduction in mortality obtained by splint teams on the battlefield as they were employed at that time should have influenced us much more that it did in the after-care of these patients. Now we have learned that frequent exposure of the wound for chemical dressings is unnecessary and all these patients may be treated in this simpler way.

First, then, the limb should be brought in correct length by proper traction. This may be done on the battlefield, at the first-aid station, or on a proper traction table in the operating room when the patient arrives at a suitable hospital. Whenever it is done, and under whatever circumstances, the correct length and the correct contour of the limb should be the primary consideration. This "setting" of the fracture and the limb may be done at the same time that hemorrhage is being controlled and that transfusions, sedatives, or other kinds of so-called anti-shock therapy are being employed. The custom of having the patient wait in bed or on a pillow with a damaged extremity in poor position and subject to trauma by movement and muscle spasm is entirely wrong.

We have demonstrated on numerous occasions that patients in shock will recover on the operating table during the time that traction is being applied, skeletal pins being put in, and plaster-of-paris casts put on, not because of transfusions and stimulation, but because of restoration of normal physiology in the nerves, circulation, lymph channels and soft parts of the limb at the same time that the fracture is being replaced in correct position.

If the patient with a contaminated compound-fracture wound is splinted in correct position and if the wound is left open without sutures or drainage tubes, he will do well without postoperative

[1] Hey Groves, E. W.: *Brit. J. Surg.*, Oct. 1930.
[2] Orr, H. W.: *Brit. M. J.*, 1933.



Figure 1

A. (top) Position of patient on traction table for traction-correction of knee contracture or deformity due to (or with) shortening of the limb from any cause.

B. (center) After administration of the anesthetic, the limb is pulled down to full length and correct position by a single steady pull on the foot.

C. (bottom) The plaster-of-paris cast is put on down to the ankle before releasing the pull on the foot. Then plaster is applied to the foot without pressure or constriction.

wet dressings and irrigations. Plaster-of-paris casts with skeletal pins to hold all the parts in correct length and position have proved to be the best method of carrying out this program. In this way, also, the secondary trauma to the wound is prevented and the local infections and septicemia so often brought on by frequent dressings do not occur.

An outline of the routine followed in my practice is as follows:

As soon as the patient is seen, the injured limb is brought into correct length and position by traction.

By means of gentle manipulation and support, all the parts of the limb are restored to as nearly anatomical relationship as possible.

At the same time sedatives, stimulants, intravenous fluids or blood transfusions are provided.

Then the limb and the wound are cleaned up. An extensive débridement is carried out so that all parts of the wound are exposed to the air and drainage of all the recesses contaminated by the injury is provided.

Now, without sutures or drainage tubes, a vaseline gauze pack is put in the wound in such a way as to provide a crater or saucer-like opening of the entire contaminated area. This vaseline pack should entirely fill the wound and extend beyond the borders of the wound for a sufficient distance on the skin so that discharges may be taken up at the edges of the vaseline dressings by the dry cotton and gauze dressings on the outside.

Skeletal pins are passed through the limb both above and below the fracture area so that length and position obtained on the traction table is maintained as the cast is put on and as the cast includes the pins.

Sufficiently extensive casts must be applied so that the patient, as well as the injured extremity, is under perfect control.

Following this procedure no dressings are done unless there are definite indications or surgical complications. These may occur only if inadequate drainage has been provided at the time of operation or if the pack is put in too tightly.

The influence of this treatment in the prevention of tetanus and gas bacillus infections has not been

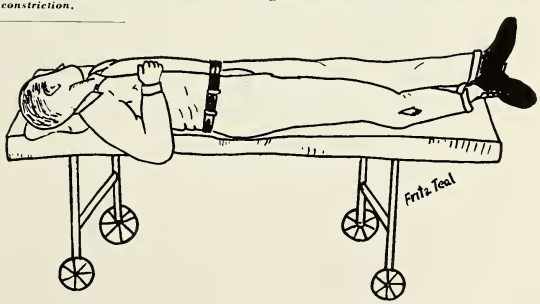


Figure 2

The patient arrives at the receiving room from the ambulance—usually without a splint.

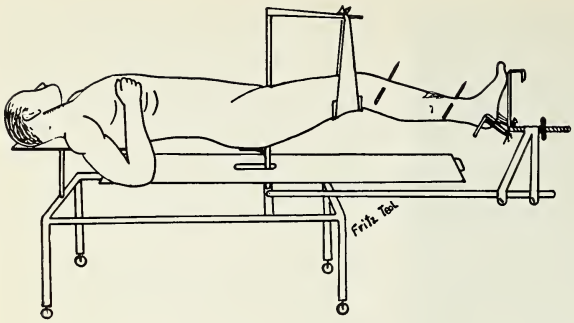


Figure 3

The limb is brought into full length and fragments inta correct relationship by tractian by a pin thraugh the os calcis Fixatian pins inserted belaw and above fracture when necessary.

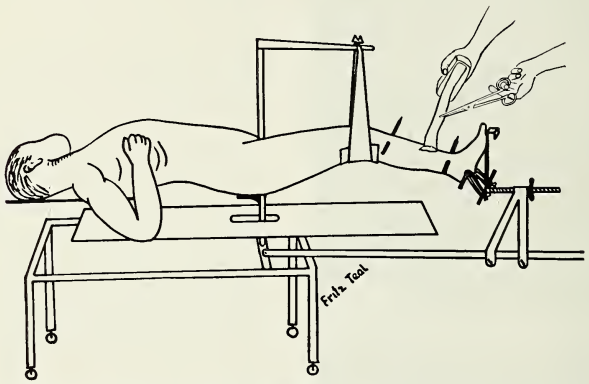


Figure 4

Debridement ar drainage operatian is dane (early or late cases) and the waund packed lightly to the battam with vaseline gauze. Dry cotton gauze pads are bandaged on.

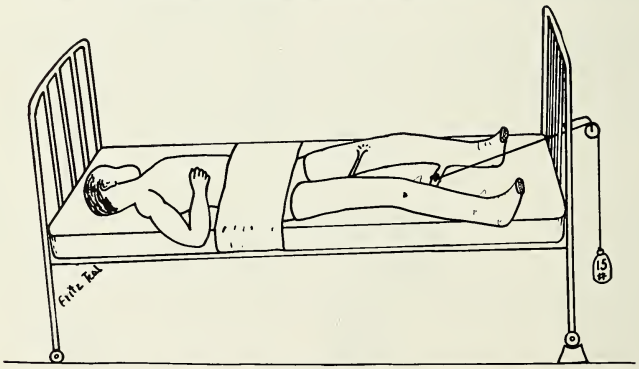


Figure 5

In double spica cast the patient is put to bed with faot af bed elevated slightly and 10 to 15 pounds of weight attached ta the cross bar. Patient is to be turned on the face three or four times each twenty-faur haurs. No windows in the cast or dressings until healing is well established.

generally appreciated. Many others besides Dr. Trueta have called attention to the fact that these complications have been practically eliminated. If one remembers the kind of dressing employed, it will be seen that around the edges of the cast, as well as the edges of the dressing, air and oxygen have access at all times, even to the deep parts of the open wound. It is not necessary to make windows in the cast or other openings in the dressing in order to obtain this result. Actually, in our experience over many years, no gas bacillus complication has occurred when this program has been properly carried out.

Those who object to the use of skeletal pins and express a preference for wires, ice tongs, or other forms of skeletal fixation, have been misled by an attempt to use these devices with weight-and-pulley traction as a rule. None of these skeletal traction devices can be depended upon to do well if elastic traction or weights and pulleys are employed. Anyone who once uses pins fixed in plaster-of-paris will abandon the more cumbersome and less efficient wire and special splint devices. With the patient in correct position on the operating table, pins may be put through the bones by a small motor and then the plaster-of-paris cast put on without disturbance of the injured part or the patient.

As soon as the plaster has set, the length, position, and immobilization of all the parts are permanent. We have used hundreds of pins in this way and have yet to have necrosis or infection, even in the soft parts. This can occur only if interference on the part of the patient is permitted or when the program has been interfered with by someone else.

With the limb in correct position and muscle spasm eliminated in this way, these extremities and patients are really at rest in such a way that no disturbance, either from the fracture or from the pins, is to be anticipated. Moreover, this plan applies with equal success to patients who do not come under our care until later. As primary treatment, fixation pins in plaster-of-paris cannot be excelled, but when revision of position or even direct fixation operations upon bones in malposition must be carried out, the matter of control by pins and plaster-of-paris is equally satisfactory and contributes equally to obtaining satisfactory results.

Whether it is primary or secondary treatment, therefore, correct reduction of all the parts including the bone fragments, relief of muscle spasm, adjustment of the patient and the patient's limb for the most satisfactory ultimate position and function, and protection of the patient against infection and postoperative complications, are all favored by this program.

PUBLIC HEALTH PREPAREDNESS

Speaking at the opening session of the Annual Conference of Health Officers and Public Health Nurses at Saratoga Springs on June 25, Surgeon General Parran outlined the contributions that public health can make at this critical time for the safety of our country. The task of national defense is different today from what it was twenty-five years ago. Science has increased the ferocity of war; it has also expanded the scope of what doctors and public health workers can do for preparedness. One of the risks to national unity of action lies in the idea that defensiveness, alone, will preserve our democracy. No human rights have been established or liberties maintained without aggressive action.

Our aggressive job is the strengthening of our manpower. In the seven-man national defense committee, thought has been taken for the needs of labor, agriculture, transportation and other problems. The Surgeon General added, however, that there had been no more thought than in 1917 of the application of medical and public health science to the problems of a nation arming. Yet the health and mental stamina of our population will determine almost entirely the effectiveness of our armament. No unification has been achieved among the various agencies concerned with the public health. As a first step in meeting the vital needs of man-power preparedness, the Surgeon General proposed that a coordinator of health and medical preparedness be appointed under the National Defense Council. He would work with and through the Surgeons General of the U. S. Army, the U. S. Navy and the U. S. Public Health Service, other federal agencies, and the national voluntary organizations concerned with the prevention, diagnosis and treatment of disease.

Professional and technical personnel throughout the nation should be listed and classified in preparation for recruitment and mobilization, if and when necessary. There is a need for an extended industrial hygiene measure to control and prevent special health hazards. Physical examinations of industrial recruits will avoid subsequent waste of skilled employees. The expansion of war industries will bring acute problems of housing, medical care and health protection for workers and their families. The venereal diseases and tuberculosis are among the health problems of great military importance. Progress in controlling these diseases has been made but much remains to be done. Not one of the seven fine persons on the Advisory Commission of the Defense Council is aware of what this country can do to eliminate tuberculosis as a major obstacle to national security.

Malaria is another major problem. Quinine is still the chief remedy, and is derived now from the Dutch East Indies. Holland is no longer able to import, process, and distribute this remedy. Its cartel prevented us from storing a sufficient war chest and yet all of Central and South America now look to us to supply their needs. No major military operations in the tropics of this hemisphere are possible without quinine or the equally potent German synthetic—atabrine. Opium is another strategic medical material. In this case it has been possible to make provision: in the vaults at Washington, formerly used to store gold, enough morphine has been accumulated for at least three years' use. Before this supply is exhausted, we can, if necessary, grow in certain areas of the United States the pain-relieving poppy plant, but it must be planned now. Another major problem in tropical America is yellow fever. The Surgeon General stated that in spite of requests from year to year, he had been unable to secure funds with which to produce a reserve supply of the effective vaccine. We do not have at present sufficient vaccine to immunize one regiment!

In the past there has been division of opinion and occasional dissension among our profession regarding methods proposed to bring health and a higher standard of medical care to our people. We can not now afford controversy. The preparedness of our man-power for national safety is not controversial. The Surgeon General concluded with an appeal for the sacrifice by a free people to make an effort in the national interest at least equal to that made by the dictatorships.

—*Health News, New York State Dept. of Health, July 8, 1940.*

THE MEDICAL SERVICE OF THE UNITED STATES ARMY

LIEUTENANT COLONEL PAUL R. HAWLEY
MEDICAL CORPS, U. S. A.
CARLISLE BARRACKS, PENNSYLVANIA

ORIGIN AND EARLY DEVELOPMENT OF MEDICAL SERVICE IN ARMIES

The physician is a relative *parvenu* in the ancient and more or less honorable profession of arms. Primitive peoples are curiously indifferent to suffering—in human beings as well as in other animals; and, for ages in the history of the World, wars were fought with no provision for the care of the sick and injured.



Lt. Col. Hawley

Medical service of armies may be said to have had its origin in the merciful practice of despatching the wounded—both friend and enemy. But this undoubtedly was in the nature of abating a nuisance rather than of alleviating pain. For casualties always have had, and still have, a great nuisance value. The morale of fighting troops suffers severely when the wounded are not removed promptly from the field; and one of the basic missions of modern medical service is the prevention of the adverse effects of unevacuated casualties upon combat efficiency.

After the practice of medicine began to acquire some small dignity, it became fashionable for military commanders to take with them on campaign their private physicians—whose services, however, were not available to the rank and file. The deep lines of suffering, and the expression of utter hopelessness, in the face of the Dying Gaul are eloquent records of the fate of the wounded soldier of his day.

As theaters of operations became populated, kindly-disposed folk, residing in the neighborhood of the battlefield, provided all the medical service available to the common soldier who was too poor to pay for better. A growing humanitarianism prompted the organization, during the Crusades, of societies dedicated to this work. These societies were, for the most part, religious in nature; and some of them, from contemporary accounts, were more effective in the field of theology than of surgery.

Thus far the medical service of armies was voluntary in origin and charitable in nature. Then the advent of the principle of public responsibility in the theory and practice of government introduced the new concept that a soldier, disabled in the service of his country, was entitled to medical care and treatment at the public expense. Gustavus Adolphus was the first great commander to provide his army with surgeons. This was about 1630. The English soon followed; but no hospitals were established and no funds were set aside for medicines or other supplies. The army surgeons were supposed to furnish their own supplies, and the sick and injured were billeted on the people. Samuel Pepys speaks of the wretched condition of the seamen wounded in the Dutch War of 1652.

The first permanent military hospital was the Hotel des Invalides, in Paris, founded in 1674; but it was more a home for disabled veterans than a hospital for acute cases. The English military hospital at Chelsea was established in 1682, and their naval hospital at Greenwich in 1695.

Thus, by the year 1700, two essential elements of medical service were in operation—primary medical care and treatment in the field, and general hospitals at military bases. No line of demarcation, save possibly duration of treatment, was drawn between the functions of these two medical echelons. Definitive treatment was given in the field. This was possible, and not entirely impracticable, because of the character of the warfare of the period. Battles were discrete episodes rather than successive phases of a continuous operation. They were few and far between, and were almost always tactically, if not strategically, decisive. This is to say that one or the other army usually sent the enemy flying, and remained in undisputed possession of the field to lick its wounds at its leisure before preparing to resume operations. Casualties could be cared for in the neighborhood, and there was no great necessity for the third essential element of modern medical service—a system of evacuation of the combat zone.

Then followed more than a hundred years of retarded development. Partly because of the confused state of general medical knowledge, partly because the miserable pay and humiliating status of medical officers attracted too little ability to the calling, and partly because of the traditional contempt of the average fighting man for, and his want of interest in, the noncombatant auxiliaries of his profession, medical service made scant further progress until the American Civil War.

DEVELOPMENT DURING THE CIVIL WAR

The medical service of the Union army, in 1861, consisted of permanent and semipermanent hospitals in posts and camps, and of one or two medical officers and an enlisted hospital steward in each regiment. Other enlisted assistance, required in the care of the sick and injured, was furnished, in theory at least, by detail from other branches of the army. The experience of the first

* *Dr. Hawley's grandfather, Dr. Andrew D. Hawley, and his father, Dr. William H. Hawley, were both members of the Union County (Indiana) Medical Society until their deaths. Dr. Paul Hawley is a native of Union County and practiced for a short time there.*

year of the war, however, focused the attention of commanders upon the serious consequences of an inadequate medical service. Case fatality rates were a public scandal, and disabled were discharged by the thousands. In combat, fire power habitually was impaired to an alarming degree through the generous assistance to the rear furnished a casualty by his able-bodied comrades. A mere scratch usually rated seven or eight helpers, motivated by sympathy or some less lofty emotion. It was this last evil, more than any other, that paved the way for the establishment of a complete and autonomous service for the collection and evacuation of casualties. Manpower was still plentiful and could be squandered. Suffering had long been an invariable, if unpleasant, concomitant of combat; and this war was no different than any other. But this fading away of firing lines to help a few wounded to the rear—that was something new and something that touched the commander in an especially sensitive spot. So, largely to permit, or force, the fighting man to stick to his trade, a really effective medical service was developed for the first time in history.

No one genius conceived the scheme in its entirety. Surgeon H. S. Hewitt, U. S. V., who was the Medical Director of Grant's army, organized and operated a centrally controlled system of evacuation at the Battle of Fort Donelson, in February of 1862. He pooled 28 regimental hospitals and, from them, organized four field hospitals. He took over all regimental ambulances and evacuated the wounded from front-line dressing stations to the field hospitals. The system worked so well that it was adopted in this army for habitual use.

But it is Jonathan Letterman who will always be regarded as the father of modern field medical service—and rightly so. He was the first to effect a permanent, authorized organization. Other organizations before were all temporary and provisional, frequently extemporized anew on the eve of each battle and usually without regard to the tactical organization of the troops to be served.

Letterman was a man of unusual ability and great energy. He relieved Tripler as Medical Director of the Army of the Potomac on July 4, 1862, when this army was going through its darkest days on the Peninsula. It had no medical service worthy of the name. It had abandoned more than 2,500 wounded to the enemy at the Battle of Gaines' Mill on June 27. Others were abandoned at Frayser's Farm; and such of the wounded as had escaped capture were in a deplorable state. Within a month of his reporting, Letterman had sold his plan to McClellan and the Ambulance Corps was in the process of organization. The idea was not original with Letterman, but he perfected it and was the first to place it in operation. Its greatest differences from other similar plans were that in this plan the organization of the medical service was permanent and followed the tactical organization of the army.

The evacuation of the Peninsula forced a temporary suspension of the development. Letterman followed his chief into seclusion while Pope was given the opportunity of crossing swords with Lee. Disastrous as was the Second Battle of Bull Run (Pope *vs.* Lee), the Union medical service was even worse than the Union tactics. Wounded still lay on the field five days after the fight.

When McClellan was reinstated after Second Bull Run, Letterman pushed the organization of the Ambulance Corps. At the Battle of Antietam, fought September 17, 1862, it was given its first test—and what a test! Antietam is yet the bloodiest single day of fighting in the history of American arms. Nevertheless, all wounded were removed from the field within twenty-four hours—a record up to that time—and there were about 10,000 Union wounded and 2,000 Confederate wounded who fell within the Union lines.

However, there was a serious defect in the Union medical service at Antietam. Seventy-one different hospitals, mostly regimental, were operated on the field, and the wounded were scattered all over the countryside. Letterman recognized this defect and corrected it. On October 30, 1862, the order was issued establishing a field hospital for each division, and these functioned well at the Battle of Fredericksburg on December 13, 1862. The experience at Fredericksburg pointed to one essential link still missing from the chain of evacuation—a hospital at the railhead, where wounded could be collected just prior to extended evacuation from the combat zone. And this was the last addition to the chain of evacuation in the Union army in the Civil War.

There have been no revolutionary changes since that time, and the plan of field medical service, developed by Jonathan Letterman in 1862, forms the basic framework of the present-day medical services of all the armies of the World.

FUNCTIONAL ORGANIZATION AT PRESENT

The medical service of the United States Army is organized into five functional echelons. These are, from front to rear: unit medical service, division medical service, army medical service, and the medical services, respectively, of the Theater of Operations and of the Zone of the Interior. The first three of these echelons serve mobile tactical units and are, therefore, made up exclusively of mobile medical units. The last two echelons pertain to territorial commands and the medical installations thereof are, for the most part, fixed. The corps, which is a tactical unit occupying in the chain of command a position between the division and the army, has few medical responsibilities. Hence its medical service is, for all practical purposes, in the same medical echelon as that of the division.

It is manifestly impossible, within the scope of this article, to discuss all of the numerous and varied functions of medical service; and the abbreviated descriptions of the operations of these five

medical echelons will be limited to those pertaining to the care, evacuation, and treatment of the soldier who is wounded in battle.

Unit medical service consists of the medical detachments which are organic elements of all regiments and similar units of all branches of the army, except purely medical units. We may consider, as a type, the medical detachment of the infantry rifle regiment. This detachment is composed (at war strength) of eight medical officers, two dental officers, and 96 medical enlisted men. It is organized into a headquarters and three battalion sections—one section for each battalion of the infantry regiment. Each battalion section is composed of two medical officers and 27 medical enlisted men.

These battalion sections are the foundation of all field medical service. They afford the first medical care and treatment that the sick or injured soldier receives; and the ultimate outcome of a case often depends more upon the limited treatment given by these front-line medical units than upon the elaborate measures undertaken in well-equipped hospitals farther to the rear.

The battalion section is organized into an aid station group, litter-bearer squads, and company aid men. The company aid men—ordinarily two to each infantry company—follow their companies into action and remain with them all times thereafter. They render first aid on the spot and, when necessary, remove the casualty to a sheltered place nearby and make him comfortable. If the wounded man can walk, they direct him to the battalion aid station in the immediate rear. Having done what they can for a casualty, they hasten forward to rejoin their companies.

The litter-bearer squads follow closely behind the fighting infantry line and remove to the aid station such casualties as are unable to walk. This aid station is established closely behind the firing line, and is moved whenever necessary to maintain close contact with the combat elements of the battalion. In the aid station the casualty is examined by a medical officer. Emergency treatment only can be undertaken in such an exposed position, such as simple anti-shock measures, control of hemorrhage, tetanus prophylaxis, and the fixation (not necessarily reduction) of fractures. With the removal of the patient from the field to the aid station, and his preparation there for further evacuation, the responsibility of the unit medical service ends, and the next step is taken by the division medical service.

The organization of the *division medical service* varies with the type of division—whether it be a "square" or "triangular" infantry division, a cavalry division, or a mechanized division. But, regardless of any differences in administrative or tactical organization, each division medical service includes three functional types of subordinate elements—collecting, evacuating, and clearing.

Collecting units establish collecting stations in rear of battalion aid stations, and as near to them as ambulances can be operated with reasonable safety. Each collecting unit will evacuate two or more aid stations in its front—by ambulances, if practicable; by litter-bearers, if necessary. In the collecting station the casualty is again examined; dressings are adjusted or replaced; and such other emergency treatment is given as is absolutely necessary to save life or limb and to prepare the patient for further evacuation.

From the collecting station the wounded soldier is taken to the *clearing station* by ambulance elements of the division medical service. The clearing station—normally one to each division—is established some four to seven or eight miles in rear of the front line. Although its relatively sheltered position permits somewhat more elaborate measures to be undertaken than are practicable farther forward, here, too, treatment must be limited to such measures as are absolutely required at the time. There are better facilities here for shock treatment; transfusions are practicable. Better fixation of fractures, with reduction of some, is possible. However, no definitive treatment can be undertaken this near the front line for several reasons, among which is that definitive measures usually immobilize the patient for some time. So, in the clearing station as well as in the installations farther forward, the prime objectives of treatment are to save life or limb, and to prepare the patient for further evacuation. With the assembly of the casualties of the division in the clearing station, and their limited treatment completed, the responsibility of the division medical service ends, and the army medical service takes up the task.

The *army medical service* operates two types of mobile hospitals: surgical and evacuation, and an ambulance service. *Surgical hospitals* are established, when necessary, in the vicinities of division clearing stations, there to take and care for such serious cases as cannot be immediately evacuated without grave danger to life or limb. This prevents the immobilization of the division medical service through the accumulation of "nontransportables," and permits it to move its clearing station whenever necessary to conform to the movements of combat elements.

Evacuation hospitals are set up on rail (or water) lines, usually somewhere between 15 and 30 miles behind the front line. The army ambulances evacuate the casualties in two or more division clearing stations to an evacuation hospital. This type of mobile hospital is designed and equipped to undertake major surgical procedures, and is the first installation that the casualty reaches where such are practicable. However, when such major procedures can safely be postponed, the patient is not operated upon until he reaches a general hospital.

The responsibility for the patient passes, at the evacuation hospital, from the army to the *Theater of Operations.* The theater operates hos-

pital trains (or boats) which transport the patients to general hospitals well outside the combat zone. In the general hospital definitive treatment of the patient really begins, and there he remains until his case is finally disposed of.

The *medical service of the Zone of the Interior* comprises station hospitals and general hospitals which care for the sick among troops being mobilized and trained, and among the large numbers of troops required for supply and other administrative functions in this zone. Long-duration battle casualties may also be evacuated from the Theater of Operations to the Zone of the Interior for care and treatment.

All these medical agencies and installations from front to rear are known collectively as the chain of evacuation. Two or three characteristics are apparent in this system. One is that there is a successive accumulation of patients into larger and larger groups. At the front, since the wounded are scattered over wide areas, they must first be collected into groups. Large, and hence relatively immobile, installations are not practicable so near the front. Front-line medical units must be highly mobile, and hence are small. But continued care and treatment of casualties in small groups is inefficient and uneconomical; and, as rapidly as combat conditions will permit, the medical installations are made larger and larger, and each installation receives the casualties of two or more smaller installations in its front. There is, of course, a point beyond which the grouping of casualties is uneconomical. When this point is reached, parallel chains of evacuation must be established.

Another characteristic is that the responsibility of each echelon lies exclusively to its front. Contact is the essence of medical support; and, since it is the forward elements that always require the support of rear elements, and not *vice versa*, responsibility for contact and support is limited accordingly.

MAJOR PROBLEMS OF MEDICAL SERVICE

Contrary to the conception of many people, the actual care and treatment of the sick and injured is probably the easiest task of the medical service. Once the patient is placed in the hospital, the problem is simple. The real problems lie in the fields of organization and planning.

Let us assume a situation to illustrate these problems. Suppose that an army of 4,000,000 men will soon be mobilized. Of these, an expeditionary force, with an ultimate strength of 2,500,000, will be sent overseas to resist a threatened invasion of a possession of the United States. To limit the scope of the problem, we shall consider only this expeditionary force; and, further to simplify it, we shall assume that the movement overseas will be accomplished without enemy reaction and that operations will be restricted to land warfare after the arrival of the expeditionary force. Required: the medical plan for the Theater of Operations.

The first problem is: how many casualties must the medical service prepare for? Regardless of the character of military operations, we have with us always the sick and the non-battle injuries. How many of these may we expect? What types of sickness will prevail? How many hospital beds will be required for their care and treatment?

As a point of departure we turn to our experience tables which cover the experience of United States troops for more than a hundred years. From these we may select an average figure. But it is only an average, and is subject to the influences of many factors peculiar to the situation at hand. From what parts of the United States will the troops in the expeditionary force be drawn? Troops from certain parts of the United States will have three times the sickness that troops from other parts will have. What will be the racial distribution of the troops? Colored troops will have a higher sick rate than white. How long will the troops have been mobilized before they are sent overseas? Seasoning reduces the sick rate. What will be the effect of the climate, the local surroundings, and the general health conditions in the overseas theater? Sickness among the troops will be influenced by their environment. How much seasonal variation in sickness may we expect? In the United States the average is about 70 per cent, but some years it is considerably higher; and we must provide facilities not for the average but for the peak load.

Next there is the question of battle injuries. These must be estimated from the strength and combat efficiency of the enemy; from his weapons and other casualty-producing agents; from the character of the operations contemplated by the United States commander; and from the characteristics of the terrain over which the fighting is expected to take place.

But the number of hospital beds that we shall require depends not only upon the number of patients admitted but also upon the length of time that each remains. So we must estimate the average duration of treatment for all classes of cases. For the sick, it will depend upon the types of diseases. For battle injuries, it will depend upon the type and location of wounds; and these, in turn, depend upon the nature of the casualty-producing agents and the character of the operations. For example, injuries from chemical agents are of shorter duration than gunshot injuries; injuries from small-arms missiles are of shorter duration than shell wounds; and there is, for obvious reasons, a higher proportion of head injuries in trench warfare than in the warfare of maneuver.

There is still another factor to be considered—the so-called dispersion factor. As is well-known to all physicians, a thousand-bed hospital rarely can accomodate 1,000 patients because, since patients must be more or less segregated by classes, some departments will be filled to capacity while others still have some vacant beds. Furthermore, hospital trains cannot peddle patients from door

to door to fill each hospital to capacity, but must deliver full loads at one place. This loss of beds, due to the dispersion factor, must be estimated and added to the figures previously arrived at.

Having arrived at an estimate of the medical facilities required, how shall they be distributed? Where shall general hospitals be located? How shall mobile hospitals be allocated among the subordinate commands?

The answers to these questions, and to many others that have not been here propounded, require weeks of careful study and research by officers who have been specially trained along these lines. But, in the accuracy of the answers lies the real measure of efficiency of medical service—not in the answer to the question as to whether one Captain John Jones, Medical Corps, is a good surgeon or a poor surgeon. The finest medical and surgical ability in the United States —and there is no finer—will be of little value in war if the medical service be not organized and planned in a way that will distribute and utilize this ability to advantage.

I am often asked why it is necessary to organize and train a Medical Reserve Corps. "Why," people ask me, "can't you just take civil practitioners and put them in hospitals and let them take care of the sick and injured soldiers just like they have been doing for their own patients for years?" The answer is: you can, and we do. But that is by no means the complete answer, and I trust that, if nothing else, this article has pointed out that there are many more angles to medical service than writing a prescription or removing an appendix. If war comes, we shall need the common or garden variety of doctor—thousands of them. But we shall need also, and badly, thousands of trained medical officers.

In training its reserve, the Medical Department assumes that the reserve officer is competent to practice his profession in war as well as in peace. But it knows, from bitter past experience, that he is not competent to serve in tactical units, or to organize and direct a medical service even of a small unit, until he is familiar with all of the military aspects of the medical problems.

TREND OF FUTURE DEVELOPMENT

With the possible exception of very recent events, there has been no experience to indicate that the *basic principles* of medical service should be revised. This is not to say that medical service is static. Methods must be, and are being, revised to meet changing conditions. The most important military developments since the First World War are in the field of mechanics—on the ground as well as in the air—and the greatest effect of these developments has been in the speed of maneuver. The *tempo* of warfare has been accelerated greatly; and this is extremely important to us because time is a critical factor in medical service.

If, then, I were asked what changes must be made to meet these new conditions, I would answer that we must increase the speed of evacuation in forward areas. When the artillery takes to trucks, it is time for us to stable our horses; and, when the plodding doughboy mounts a roaring monster and spreads death and destruction at thirty miles an hour, it is time to forget that wounded men once were carried one or two thousand yards by litter squads. What changes we shall make I am in no position to predict, and I leave the solution to my betters. But I may, with propriety, venture the prediction that there will be no place in the medical service of the future for the horse and buggy doctor.

ABSTRACT: GRIP OR COLD SYMPTOMS IN PREGNANCY SHOULD HAVE IMMEDIATE TREATMENT

A pregnant woman with any of the symptoms generally attributed to grip or the common cold should be given immediate treatment lest the condition progress into a serious form of lung infection, Milton G. Potter, M.D., Buffalo, N.Y., recommends in *The Journal of the American Medical Association* for Aug. 17.

The most frequent symptoms in such cases, he says, are a feeling of malaise, stuffiness in the head, sore throat, a slight rise in temperature, with or without pain in the chest, and stomach and intestinal disturbances.

"Whether this group of symptoms is called grip or a common cold is immaterial," the author declares. "The fact remains that a pregnant woman with these symptoms should have the serious consideration of the physician in charge and treatment should be instituted immediately. Too often the physician considers this condition lightly and allows what might have been a mild attack to progress into one of the more serious types of pulmonary (lung) infection." Unless checked, such infection will have severe consequences for both mother and child, he observes.

The normal changes in the lungs during pregnancy, he points out, often bring into play latent infections. As the growth of the womb continues there is a slight congestion of the lungs with an increased side expansion and the breathing is performed more largely by the rib muscles. These changes are, as a rule, more pronounced in the woman giving birth to her first child than in the woman who has already borne children, because there is less relaxation of the abdonimal muscles in the former. This explains why quiescent infections in the lungs may be activated.

The danger is especially great in pregnant women with arrested lung tuberculosis. While it is generally agreed that marriage in the presence of active tuberculosis should be forbidden, matrimony and pregnancy for women with latent tuberculosis present a problem. It is impossible to tell when the latent disease may again become active, and the strain of pregnancy and nursing adds to the risk. "It is my belief," the author says, "that if the tuberculosis is made active again before the fifth month abortion should be induced. In the late months of pregnancy nonintervention should be the rule, as the risk of delivery is no greater than that of abortion. Nursing should be prohibited, the baby separated from its mother and, if repeated pregnancies occur, sterilization recommended."

THE PROBLEM OF THE PSYCHOPATH IN RECRUIT TRAINING OF THE U. S. NAVY

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Psychiatric investigation and observation at the various Naval Training Stations has become a prominent and valuable measure especially in regards to the determination of mental and temperamental fitness of a man for recruit training and future active duty and also in consideration of punitive measures.

With the increasing amount of applications for enlistment many types of personality and individualism are seen, most of which are fortunately of a stable, well balanced, and physically fit class. However, there are some who after successfully meeting all requirements at time of enlistment will under disciplinary routine begin to reveal evidences of a psychopathic makeup and will become a burden and a source of much annoyance. This sudden change of environment and the rather strict discipline appear to be the chief etiological factors in the uncovering of psychopathic tendencies. This fact is particularly more emphasized when it is realized that at this time of life, the adolescent period, character, habits, and personality are being moulded. Therefore these unfortunate individuals upon realizing their inadequacy and inability to adapt themselves to their new life become discouraged, emotionally unstable, and eventually develop a functional illness, showing itself in various forms. Many types of defense reactions are employed to atone for these ill-fated conditions. A majority resort to malingering, which in itself is a strong indication of a psychopathic constitution. Enuresis, epileptiform and hysterical seizures, inability to swim, painful feet and the assimulation of a diseased condition, are the complaints most frequently encountered. In several cases attempts at self destruction have been resorted to and after careful investigation such actions have been found to be more or less unintentional and more the result of an emotional upset and a play for sympathy and consideration.

A relatively few become antagonistic and will engage in misdemeanors which require punitive action. Here the question of mental competency and responsibility arises and is certainly to be considered in order to justly determine the course to pursue in properly dealing with the offender. As a rule a psychiatric study is made before legal proceedings are conducted in order that injustice will not be done. Often an offense is the uncontrollable reaction to a dislike or discomfort in one who lacks the finer sensibilities and is unable to exercise proper judgment.

This psychopathic constitution, as is well known, is not acquired, being definitely a hereditable defect, but is easily aggravated by unusual occurrences and any interference with the ordinary course of living. As is often the case, the Navy recruit has come from a very quiet life, where there has been irregularity, lack of responsibility, and probably a number of unfavorable influences. After entering the Navy, there is a marked and sudden change to a life of discipline, regularity, and responsibility. After several weeks of training the psychopath will be discovered and means of disposition are considered. If only an inability to adapt himself or to show a fairly normal aptness, a discharge on grounds of inaptitude is given. Cases showing functional disorders and evidences of physical and anatomical stigmata of degeneration are given a discharge by a medical survey. Those showing more or less anti-social and behavioristic tendencies rather than a physical picture are discharged as undesirables.

A very small percentage of recruits after a brief training period will show psychotic manifestaitons which have been more or less latent and unnoticed previously, and due to sudden environmental changes have become acute. These cases, when diagnosed as a definite mental aberration, are surveyed and sent to the Hospital for the Insane at Washington, D. C., for institutional care.

Efforts are made to assist the psychopath as much as possible in the way of leniency and correction of all possible organic disabilities but after due consideration he is, in practically all instances, definitely unfit for duty in the U. S. Navy and should be discharged as soon as possible, mostly for his own welfare and to prevent a critical situation for which he may not be altogether responsible.

The psychiatrist, therefore, has a very important duty to perform in the early recognition of those individuals showing constitutional weakness and functional conditions and to eliminate them as soon as possible by means of the various accepted methods. By so doing a more proper functioning group of men can be expected, military discipline would improve, and certainly there would be a marked reduction of anti-social tendencies requiring punitive consideration.

TURN TO PAGE 478—READ STATEMENTS BY DRS. LAHEY AND RANKIN, MAJOR TYNDALL, COLONEL HALLAM, AND OTHERS

THE MEDICAL OFFICER FROM CIVIL LIFE

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It would seem proper at this time to call attention briefly to some of the accomplishments and contributions to medicine made by physicians in the military service, many of whom have gone down in the history of medicine with the pioneers of that profession. We immediately think of Ambrose Pare, often regarded as the father of modern surgery and who was chief surgeon to the army of King Charles. Laveran, also of the French Army, discovered the plasmodium of malaria, and Sir Ronald Ross of the Indian Medical Service described its life cycle and mode of transmission. It was Russell of the United States Army who perfected anti-typhoid vaccination. Reed, Carroll, and Lazear of the same service were the heroes of yellow fever and immortalized their names in the field of preventive medicine. Beaumont, the youthful army surgeon, was the first to study gastric digestion and the story of his investigations, crude as they were, marked an epoch in research medicine. The names of Sternberg, Ashford, Phelan, Vedder, Craig, Sir Patrick Manson of the British Army, are all inseparably connected with the development of bacteriology, parasitology, immunology, and the study of tropical diseases. These and many others, as officers in the army medical service of civilized nations, have been leaders in the various specialties of medicine.



Dr. Carter

In a review of the biographical history of the great men in this profession, it is noted that many of them had their first training in the military service, where, in addition to professional experience, they learned discipline, poise, and self-control, so necessary to the physician in civil life.

The military surgeon is first of all a doctor, one who is skilled in the arts of diagnosis, of healing and of preventive medicine. At the same time the military surgeon assumes certain roles, has certain duties, observes certain formalities and customs unknown to the physician in civil life. He is, therefore, a doctor "plus."

The physician coming from civil life into the military service is at first confused and bewildered by the apparent complexity of Army organization, yet Army organization is based on an age old system as given by Jethro to Moses, whereby there should be "Rulers of thousands, rulers of hundreds, rulers of fifties, and rulers of tens." Keeping this principle of organization in mind, many of the complications of Army life are simplified and more easily understood.

On entering the military service, no doubt many physicians feel they have completely lost their identity, and are no longer allowed to think for themselves. They live and move by the sound of the bugle, they must observe certain courtesies peculiar to Army life; even their dress is prescribed by regulations. They are overwhelmed by the bugbear of paper work and property returns. They may not appreciate the necessity of acquainting themselves with tactical problems, transportation, map-reading, methods of security, and many other subjects of a more or less strictly military nature, yet the military surgeon, in addition to being a high grade physician, must know these things.

The first lesson the newly made medical officer learns is that of discipline and subordination. He must realize that an organization as large and complicated as the Army Medical Corps must have leaders and subordinate leaders who are to be obeyed and respected. To obtain this obedience and respect, certain courtesies and formalities are required of all officers and enlisted men. To the novice, these formalities of deportment and conduct may seem unnecessary and perhaps even boresome, but if he is to be a successful officer he learns that to secure proper discipline and subordination these customs are absolutely indispensable. The officer who cannot adjust himself to discipline and implicit obedience to orders as a subordinate cannot, when the proper time arrives, hope to command others.

In time of national emergency every effort would, no doubt, be made to assign officers to posts where they would be best fitted to serve. In 1917 Gen. Munson wrote an exhaustive article on "The Square Peg in the Round Hole," in which this subject of the proper assignment of officers was discussed in detail, pointing out the necessity for the classification of all members of the medical corps. In this article consideration was given not only to professional qualifications, but to temperament, personality, and other dispositional characteristics of the officer in selecting specific assignments for him.

The average physician entering the military service from civil life would probably prefer service with a large base or general hospital, as it would keep him in close contact with medical and surgical practice and present opportunity for study and professional training. Others for various reasons, principally temperamental, may desire service with combat troops. These desires of the individual officer in all probability would be considered as far

as practicable for the good of the service. However, certain exigencies may arise when it would become impossible to assign or retain officers in the most desirable duties. It, therefore, becomes necessary that the temporary medical officer be so trained that, in case of necessity, he may be able to perform any duties required of the Army Medical Corps. Paper work and property returns have been the stumbling block of many a young officer, and in the past I have seen professional duties neglected simply because the officer was busy with various reports and communications, or occupied with counting property and preparing returns. While this work is absolutely necessary for the smooth operation of the medical corps, and a vital factor in the working of the War Department, it is believed that in any future military activity these tasks will be much simplified through the Medical Administrative Department, thereby allowing the medical officer to devote himself entirely to professional duties. Service with large hospitals in the rear does not necessitate an extensive knowledge of military affairs, aside from the administrative and executive duties connected with an institution of that sort. These duties are naturally more complicated and present many differences from those encountered in similar civil hospitals.

In the field with combat troops the situation is somewhat different; here the medical officer must be familiar with sanitary and combat organization, movement of troops, character of gunfire, and methods of security. He must be able to read maps intelligently, to have a reasonable understanding of motor and animal transportation; he must be acquainted with the various systems of communication, and he must learn the fine art of contact and cooperation with officers of the staff and line. At first it may seem superfluous that a doctor, skilled in some speciality, coming into service to treat the sick and wounded, should be required to spend his time learning these extra professional duties, even though he is serving with combat troops. In the field the medical corps becomes an integral part of the fighting forces and is under the authority of the commanding general, just as any other branch of the Army. Under the supervision of the medical officer, aid stations, dressing stations, collecting points, field hospitals, and ambulance services are established. The medical officer must know, therefore, the relative strength and position of the fighting troops, he must be able to read his maps in order to locate his own organizations in safe and accessible positions, he must know how to communicate with higher or subordinate commands, to obtain information as to battle casualties and the success of the engagement. In the field the medical officer more nearly assumes the role of commanding officer than when serving with hospitals in the rear; he must have the art of handling men, of giving concise, explicit orders, and of reaching quick decisions. Being a unit of the fighting forces, he must appreciate the fact that many of his orders and instructions will come from officers of the staff and line, and much of his information will be from the same source. Therefore, he must be prepared to cooperate and coordinate his activities with those who are conducting the battle.

It has been the experience in past wars that officers of advancing age are unable to withstand the rigorous life of front line warfare. So, no doubt, in case of national emergency, insofar as is practicable, only young, vigorous, healthy officers would be assigned to combat troops, the older officers serving in the rear.

The question is often asked as to the opportunities for research study and advanced professional training that are available in the Army Medical Service. In the large hospitals there is every facility for investigation and advancement in medical knowledge. Many distinguished physicians of today began their careers in the World War hospitals over twenty years ago. Yet it should be kept in mind that the primary object of war is not to serve as a training school for medical officers, and that the first function of the officer is to give his service to others, his personal advancement being a secondary consideration.

On entering the military service from civil life, many perplexing problems assail the medical officer. He probably thinks first of his personal safety. Except when serving with combat troops, his chance of sickness or injury is certainly no greater than in civil life. With fighting troops, naturally, the hazards are greater, but such are the fortunes of war, and I believe the average medical man has the same fortitude, courage, and disregard for personal danger as his brother officer with the fighting units of the Army. He then thinks of his dissipated private practice and his diminished income, of his children to educate, family to support, insurance premiums to meet, and bills to pay. Again, these are the fortunes of war. No war was ever fought without personal sacrifice for all concerned and in the event of a national emergency the medical profession as a whole and the physician as an individual will necessarily have to meet this sacrifice, along with those in other arms of the service.

I would not care to become sentimental; that should be left to the orators and the speech makers. Yet it is true that martial music squares the shoulders and quickens the pulse. We all have a feeling of profound gratitude for being allowed to live in a country such as the United States. We have a sense of personal ownership and a desire to defend our heritage. These feelings constitute an emotional complex we call patriotism and I believe that, should the test come, the members of the medical profession will forget their personal desires and show the same patriotism and willingness to serve which has characterized them on previous occasions, and the medical officer returning to civil life from an honorable service will not say "I had to join the Army," but instead will say "It was my privilege to serve with the Army."

GAS!

ELLIOTT H. PARKS
INDIANAPOLIS

Since it has been shown by careful research that 20 milligrams of mustard gas, if applied without waste, will kill the average individual, it is only a matter of simple arithmetic to show conclusively that one ton of mustard gas would kill some fifty million people. Thus it is easy to be spectacular in treating this matter of chemical warfare, and thus has many a page been filled in Sunday supplements. Similarly staggering paper casualty lists may be compiled by considering that a single machine gun bullet can penetrate three men's bodies, presumably with fatal results, and then considering the number of rounds per minute and the number of machine guns in a regiment. But in the hope of presenting a few definite and accurate facts regarding chemical warfare, such flights of the imagination will be omitted, and it is hoped that the results will be informative, even if less amazing; a moment of sober reflection leads us to the conclusion that it might be slightly difficult to administer such a minute dosage to such a large number of people, especially when it must be assumed that they would be somewhat reluctant to receive their portions.



Elliott Parks

The World War of 1914-18 saw the first use of toxic chemicals in warfare, although previous use had been made of smoke and harassing gases, and the use of incendiaries goes far back into antiquity. Chemical agents were used in the Italian campaign in Abyssinia, were not used in the Spanish civil war, and thus far, with the exception of screening smoke and incendiaries, have not been used in the current war.

While the term "gas" is popularly and loosely used to include all chemical warfare agents, such usage of the word is not strictly correct since these agents include both liquids and solids as well as true gases. Hence the term chemical agents will be used. By definition, a chemical agent is any substance which is useful in war by reason of producing a physiological action, a screening smoke, or an incendiary effect.

From the tactical standpoint, chemical agents are classified according to their primary use as:

Harassing agents, which annoy, discomfort, and impede the enemy, without permanent effects;

Casualty agents, which will produce casualties among personnel;

Screening agents, which produce screening smoke;

Incendiary agents, which generate sufficient heat to start fires in ordinary materials.

Chemical agents are classified on a basis of the length of time which an agent will remain on the ground at the point of release in a concentration great enough to be effective against unprotected personnel. If this time exceeds ten minutes, the agent is classed as persistent, and if this time is less than ten minutes, the agent is classed as non-persistent.

Finally, chemical agents are classified according to their physiological effect as:

Lung irritants—agents which when breathed cause irritation of the respiratory tract;

Vesicants—agents which attack the skin, producing burns;

Lacrimators—agents which produce a copious flow of tears and intense temporary pain in the eyes;

Sternutators — agents which when breathed cause sneezing, accompanied or followed by coughing, vomiting, headache and extreme although temporary physical disability. The terms sternutator and irritant smoke are used interchangeably;

Direct nerve poisons — agents which affect directly the heart action, nerve reflexes, or interfere with the absorption or assimilation of oxygen;

Incendiary—agents which produce heat burns when in contact with the body.

While these classifications are useful, they must not be regarded as being rigid, since most agents have more than one effect, as for instance, incendiaries may produce screening smokes, and may be used for that purpose alone, and most of the vesicants affect the eyes. The classifications are based on the principal effect.

It will be obvious that the physiological classification of an agent governs its tactical use; lacrimators will not be used when casualties are to be produced. Likewise the persistency of an agent must be considered. Areas may be denied to the enemy by contaminating them with persistent agents, the effect of which may last for several days; on the other hand, if it is expected that an area will be traversed or occupied by friendly troops within a short time, non-persistent agents will be used.

When considered strictly as items of material, chemical agents must be stable compounds, capable of being loaded into ordinary steel containers, manufactured as cheaply and simply as possible of domestic raw materials.

It cannot be stated that new chemical agents will not be developed, nor that such agents may not far exceed those known today in toxicity. It must

be expected that the unremitting research being carried on will bear some fruit. However, it is entirely likely that any new agents which may be developed will resemble those now known closely enough that certain examples may be taken as types of the various classes.

The first agent used in the World War of 1914-18 was chlorine, classified as a non-persistent lung irritant, used for casualty effect. Phosgene and chlorpicrin have been found to be superior to chlorine, and may be taken as types of the lung irritant class. Examples of the vesicants are mustard gas, widely used in the World War, and Lewsite, developed at that time but not used. Among the lacrimators are chloracetophenone, commonly called tear gas, and tear gas solution, which contains chlorpicrin in addition to chloracetophenone. Tear gas is restricted in use to civil disturbances, although tear gas solution may find use in war as an harassing agent. The irritant smokes, which exist as minute particles of solids, or aerosols, rather than as gases, and which do not ordinarily produce visible smoke clouds, include Adamsite and diphenylchlorarsine. The direct nerve poisons include hydrogen cyanide, and carbon monoxide, neither of which has been successfully used as a chemical agent. Representatives of the incendiaries are white phosphorus and thermit. It must be remembered that agents of this type may be used to produce casualties as well as to start fires in inflammable material.

Having developed a series of chemical agents having properties which suit them to a variety of tactical uses, it becomes necessary to consider the weapons which may be used for firing these agents. When the use of chlorine was introduced, in 1915, it was used in a cloud attack, by releasing the gas from a large number of cylinders emplaced along the front. The cloud of gas drifted into the opposing lines with the wind. Use of chemical agents in this manner is, of course, restricted to those agents which are true gases, which can be liquefied and placed in cylinders or tanks from which they may be released under pressure. Such operations are entirely dependent on a favorable wind direction.

Chemical agents may be filled into artillery shell, and such chemical shell may be fired, as the tactical situation may require, by all classes of artillery. The use of chemical fillings in artillery shell has certain advantages. Thus artillery fire with high explosive shell may destroy an important bridge. Fire must be continued to prevent the bridge from being rebuilt. But if part of the shells are filled with a persistent chemical agent, such as mustard gas, the resulting contamination of the area will impede, if not prevent, repair operation over a considerable period of time.

Chemical troops are armed with a variety of special weapons for firing chemical munitions, including the cylinder mentioned above, the chemical mortar, the Livens projector and various types of smoke pots and candles. Such troops will generally operate in support of other units, for the purpose of carrying out special chemical operations.

Infantry and engineer troops and cavalry may make use of grenades with chemical fillings, and of smoke pots and candles. The mechanized cavalry regiment contains a mortar platoon armed with mortars similar to the chemical mortar, for the purpose of firing smoke shells.

In the air corps, bombs with chemical fillings may be used, or chemical agents may be sprayed from tanks carried by low-flying planes. The agents used for bomb fillings are either vesicants or incendiaries, while vesicants or screening smokes are used for sprays.

Thus far, consideration has been limited to the use of chemical agents. It must be expected that measures of protection have been developed. Against lacrimators, lung irritants, and sternutators, efficient gas masks provide complete protection. To permit personnel to eat and sleep, gas-proof shelters must be provided.

For protection against the vesicant agents, special protective clothing, as well as gas masks, must be provided. Provision must be made for the decontamination of important areas which may be attacked with such agents.

The items of protection mentioned thus far apply only to individuals. Tactical protection must prevent the interference with the tactical plan by chemical attack, and protect personnel by preventing such attack, rather than providing remedies after such attack has taken place.

It would seem that the civilian population in this country should have little to fear from chemical attack. While the use of incendiary bombs in centers of population would add, possibly tremendously, to the damage produced by aerial bombardment, and the use of other chemical fillings might seriously interfere with the repair of such damage, there seems to be slight possibility that the use of chemical fillings in bombs (or shells) would produce greatly increased numbers of casualties over those to be expected from a like number of bombs or shells filled with high explosive. Certainly the picture of the Sunday supplement with populations of entire cities wiped out by a single bomb filled with "poison gas" is vastly over-drawn.

Much has been said anent the use in war of physiological agents. Many of the great powers of the world are, or have been, signatory to a pact forbidding the use of toxic gases. Without dwelling on the probable value of such a pact, or of any other international agreement, it is sufficient to say that war is in no sense a Sunday School picnic. War is an attempt to impose the will of one people upon another *by force*, or to resist such an imposition. The object of any people engaged in armed conflict is to emerge victorious at the earliest possible moment. Consideration of morality and humaneness must be applied to the causes of war, not to the methods of waging it.

MOBILIZATION AND ITS OBJECTIVES

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Napoleon said, "The strength of an army, like quantity of motion in mechanics, is estimated by the mass multiplied by the velocity." Hitler streamlined this axiom and applied it to present-day conditions.

An army prepared for defense alone serves only as a channel for useless expenditure when the power of offense is lost. Ultimately, then, there is no such thing as preparedness for defense. Technically M-Day is the date set by War Department orders when the armed forces begin to expand in a national emergency. Its meaning must be extended to include mobility in thought, movement, action and organization. It entails thinking in terms of dollars of capital, wheels of industry, and man-power, and applies as well to the spirit, psychology, and intellect of the nation.

Events in Europe prove that we can not combat ideas with weapons. At this moment our people are aroused to a state of feverish interest because of a threat about which the American Legion has preached to deaf ears for twenty years: that the right to freedom entails the right and obligation to defend that freedom; that the freedom of a democracy does not carry with it a license to convert America into a London Hyde Park soapbox from which to herald subversive doctrines in the name of free speech and civil liberty.

At the onset of the World War I our institutions of learning throughout the land were literally aflame with Germanized psychology. All through the 1920's the American Legion stressed the presence in our colleges and universities of student-body organizations subscribing to the sworn principle that they would never take up arms in defense of the flag. Thus began what is known today as the fifth-column. It is futile to attempt to mix Fascism, Nazism, and Communism with democracy.

We have but to look to Europe to realize the importance of mobilizing public opinion. No doubt a factor in Mr. Chamberlain's appeasement policy was a lack of national unity. We are told the defeat of France began many years ago and was an accomplished fact long before Hitler's tanks and dive-bombers reached the low countries. Today we see the spectacle of France setting up a political pattern which turns her defeat into a weapon against her long-time ally, England. For twenty years France freely admitted foreigners to the country, many of whom became fifth-columnists, the number being materially augmented ultimately by a great influx of spies under the guise of Belgian refugees. The modern Caesar has warned us that he will attack us from within.

Visualize England compelled to make a peace similar to that of France; the British fleet, the Belgian, Dutch, French and British island and colonial possessions, together with the whole of Nazidom aimed at us. It is probable that we could not defend the western hemisphere; it is possible we could not defend even the North American continent. In the face of all this we find no small proportion of our people averse to the principle of universal military training. Yet the oldest existent democracy has never known anything else. In Switzerland every citizen is a soldier and every soldier a citizen. We have an air-force objective of 50,000 planes, which means probably 150,000 trained pilots, while on the ground must be ten trained air personnel for each plane to keep them in the air, or a total of 500,000, and a grand total of 650,000. It will be impossible for the Regular Army and National Guard to recruit to authorized peace-time strength through voluntary enlistment. It will be impossible therefore to procure 650,000 additional air-force personnel by any other means than compulsory military service, distasteful as the word compulsory may be. William Jennings Bryan once said that this country does not need a large regular army, that we could raise overnight an army of a million men. All that could be raised overnight would be a mob of untrained men. It requires twelve to fourteen months to train an infantry division for front-line duty, and a long period of time to train men and officers in other branches of the service. Of what use would infantry be trained only to march in columns behind tanks piloted by men not adept in tank tactics? Only team-work and training count in the army. Certainly, then, mobilization begins with mobilization of thought, public opinion and psychology, without which no amount of material resources can succeed, as recent events in Europe prove.

In addition we must mobilize against the tremendous racial impacts soon to come in this country; prepare to adjust ourselves to the lower level of living that is bound to follow; for the day when the man on relief will no longer drive his automobile to the relief agency for supplies and the man with taxable assets will be glad to pay 25c-30c out of every dollar of income to his government for the privilege of living in a free country rather than as a serf under German Junkers.

Every day the question is asked, "Where does the individual doctor and the profession as a whole fit into the picture?" Beginning with the defense council in the local community, no one is better qualified and has better opportunity to assist in attuning the people to the needs of the times than the doctor. He will be called upon for

advice and leadership. Catastrophies such as earthquakes, floods, fires, air-raids with poison gas and incendiary bombs may overtake the community. Let us suppose the water plant, gas works and power stations are disabled by sabotage. Immediately the necessity arises for providing thousands of gallons of water daily; large and small containers must be had; it must be boiled, tested and distributed; coal and wood stoves found with fuel to heat them; typhoid inoculations done; people will assemble in crowds and epidemics occur with the spread of disease; housing for improvised hospital extension will be needed, with equipment and nursing attendants; he must know where he is to get 50 or 500 additional nurses because those graduate nurses that are available will be needed for administrative and supervisory duty; public latrines must be established and the sanitation and health of the community attended to—all of which will call for thought and organization in advance of the actual need.

Doctors will examine Reserve officers called up; function on draft boards in each county-seat from which recruits will be sent to the Reception Center, where 3,000 men will be processed daily. The Reception Center will be manned by a large number of various kinds of specialists, including doctors. There will be a hospital, gradually to be expanded to meet the needs of a large number of troops,—perhaps 50,000 to be in training in the vicinity within a year, and installations such as laundries and bakeries, from which the sick will be hospitalized. Of those recruits arriving at the Reception Center or examined for service twenty-three per cent will have some disability, and of these disabled twenty-two per cent will have some form of venereal disease. A training battalion will be provided into which men will be placed if they can be rendered fit for duty within three months, by treatment or surgery. The Medical Department of the army determines who will be selected and enrolled, and furnishes with its own personnel direct technical service and medical supplies in every echelon of the army from the infantry company on the firing line to and including all military establishments in the Zone of the Interior (home territory). Its units have command functions insofar as they pertain to direct control thereof. Medical Department units are assigned to all military units of the arms and services larger than a battalion, and to separate battalions, to trains of all units larger than a regiment, and to certain smaller units. Its mission is the preservation of the strength and power of the forces, through physical examination, preventive medicine, research, evacuation, hospitalization and treatment. This extensive service requires two types of Medical Department units: stationary or fixed, and field or mobile. The type and number of units are determined by the organization of the army as a whole, especially as pertaining to field or mobile units whose type and internal organization must be based on the organization of the combat troops they are to serve.

The functions of the Medical Department are:

a. Examination for admission to, and of members of, the Army, ROTC, CMTC, and certain civilian personnel.
b. Preservation of the health of the military force and inhabitants of occupied territory.
c. Medical, surgical and dental care of the sick and wounded.
d. Methodical disposition of the sick and wounded.
e. Transportation of the sick and wounded.
f. Administration of military hospitals, dispensaries, hospital trains, and other prescribed establishments.
g. Preparation and preservation of proper records.
h. Selection and classification of Medical Department personnel.
i. Veterinary service, food inspection and sanitation.
j. Procurement and storage of supplies and equipment.

At present there are but two active medical regiments and one active medical squadron in the United States, and two in oversea possessions. The type and number of inactive Regular Army Medical Department units (other than detachments) required in a theater of operations calls for:

> 15 Medical regiments; 2 Medical squadrons; 1 Convalescent, 18 Evacuation, 18 Surgical, 18 General, and 18 Station hospitals; 1 Auxiliary Group, 1 General dispensary, 18 Hospital trains, 1 Medical laboratory (combat zone), 1 Medical Laboratory (general), 1 medical Supply Depot (army), 2 Medical Supply Depots (combat zone).

As the National Guard and Reserve divisions, each with its own Medical regiment and medical detachments, are absorbed by the Regular Army, these services would expand.

Field armies of the future will be of a changed and changing pattern. The present authorized strength of the Regular Army is about 1,000 medical officers, with a like number in the National Guard, which is but 5½% of the needs for general mobilization. During wartime as much as 15% of the command may be in hospitals. This requires 6½ medical officers per 1,000 strength of the army. Therefore, an army of 2,000,000 men would require 15,000 medical officers. At present there are available about 8,500 Reserve Corps medical officers, and the additional must come from civilian doctors. On this basis, one thirty-ninth of the nation's needs for additional personnel must come from Indiana.

Mobilization must provide:

a. A force progressively available for operation in the field beginning on M-Day.
b. Harbor defense troops.

c. Reenforcements for over-seas garrisons, (i.e., Panama, Hawaii, etc.).

d. Certain other troops either for use as cadres to expedite the mobilization of additional forces, or if necessary, for immediate use.

e. The installations necessary for the mobilization and maintenance of the troops to be mobilized.

The troops under *b*, *c*, and *d*, are of little interest to us, but those under *e* are known as Service Command troops and are important to us. Initially the duties pertaining to mobilization will fall to the lot of Reserve officers but must rapidly be shifted to the shoulders of civilian doctors, thus releasing Reserve officers for duties in the theater of operations.

When and unless general mobilization comes, the ranks of civilian doctors will not be materially disturbed. The needs for purely defense or training basis, like the present strength of the Regular Army, will fall far short of the needs for general mobilization. This point should be kept clearly in mind lest there be some misunderstanding as to when individual doctors are likely to be called. However, steps for preparedness for an emergency that may come can not wait for the arrival of that emergency. Organization and coordination must be done in advance to avoid confusion, lost motion, and injustice both to the army and the individual doctor.

The medical profession has never been found wanting. It stands ready today. One physician beyond ninety years of age has signified his desire to serve in some capacity. He is mobilized spiritually and stands at the cross-roads of America as a symbol of the profession.

This is written on Bastille day (July fourteenth). One year ago a proud French people marched down the Champs Elysees to the air of the Marseillaise. Today they goose-step before the Gestapo. May that day never come for America!

JOURNAL URGES REPRESENTATION OF MEDICINE ON DEFENSE COUNCIL

Apparent Mishandling of Nutrition Problem in Washington Cited as Another Reason for Need of a Medical Coordinator

"The maintenance of the food supply of the army and of the civilian population of the country in a time of emergency is as important a question as any of the questions which may confront our leaders in times of rapid action and stirring events," *The Journal of the American Medical Association* for August 17 says in an editorial on "Food and the War."

"In World War I every foreign country early appointed a food commission to control this problem. Early in 1917 *The Journal* emphasized the advisability of appointing at once in this country an appropriate scientific body to advise on such questions. The experience of many a foreign country after the war showed how inefficient and futile had been some of the considerations given to these vital problems. In the Netherlands and Denmark people were deprived of important sources of vitamin A in order that butter might be sold to other countries. As a result, numerous children developed xerophthalmia (a disease of the eyeball) and similar conditions. In Germany the effects of malnutrition resulting from the blockade became apparent later in increased cases of tuberculosis among those who were children at the time of the war. Today German writers are emphasizing the necessity for control of nutrition as basic to the winning of any conflict.

"It is no secret that problems of maintenance of the food supply are already serious in the warring countries. Indeed, Great Britain has begun a meatless ration for some of the days of the week, inclining largely toward a diet of eggs, milk and vegetables. In a recent communication a German writer points out that the German diet must depend considerably during the forthcoming months on bread and potatoes and that it is necessary under such circumstances that the bread be a whole grain bread. Recently British authorities have appointed a food commission to control food in the British army and among the British people, and already it has been decided to prepare a bread fortified with vitamin B_1 and calcium and to offer this for sale at a price similar to that for white bread. Moreover, British authorities have been urging cooperation of the Ministry of Food with the Ministries of Health and Agriculture to develop a national policy for control of the food supply.

"In World War I the Surgeon General of the army early in the mobilization of the drafted army took steps leading toward the formation of a division in his office charged with the duty of advising on all questions relating to the nutrition of the soldier. The importance of nutrition was recognized early, yet the Quartermaster General was opposed to the establishment of nutrition officers in camp and it required six months before the Secretary of War authorized a food division for the army. The situation which confronts us today indicates the need for prompt action with regard to food and nutrition as a part of our current efforts toward preparedness. The National Research Council has a subcommittee on nutrition which is working on the problem of emergency and standard rations for the armed forces. The question of food for the soldier is still primarily in the division of the Quartermaster's office, but the Surgeon General of the army is equally concerned with the question of feeding the invalid soldier and with the feeding of troops for the prevention of illness. It is understood that two different divisions of the Advisory Commission on National Defense have set up subcoordinators who will be concerned with the problems of food. One of these divisions is that concerned with agriculture, the other that concerned with the consumer. There does not seem to be any evidence that any effort has been made to coordinate in any manner the work of these different advisory bodies, nor is it apparent from the evidence thus far available that modern dietetics and leading authorities in the field have been called into service.

"The fundamental importance of good nutrition not only for those engaged in military services but for the population as a whole as the source of military units needs no argument in its behalf. What is needed is suitable coordination in Washington of all the various bodies that will be concerned with the nutrition of the nation. Such coordination can be brought about properly only by adequate representation of medicine, which includes scientific nutrition, in the Advisory Commission on National Defense."

AVIATION MEDICINE

ALBERT M. MITCHELL, M.D.
TERRE HAUTE

Aviation medicine was brought into prominence by the war of 1917-1919 as a part of military medicine, and into civil life in 1926 by the establishment of commercial aviation. Aviation medicine is a branch of preventive medicine, since its purpose is to prevent accidents and preserve life. The record of the commercial airlines for the past sixteen months bears out this premise.

It is a well known fact that when individuals change their environment by leaving the ground they are subjecting themselves to many new physical and nervous situations. Their equilibrium is constantly changing. Their eyes are subjected to increased glare and wind. There is increased speed and at high altitudes increased cold, a decrease in oxygen supply, and changes in atmospheric pressure.

The British found during the first year of the World War that sixty out of every one hundred pilots were killed because of physical defects, but that after medical supervision and selection of pilots was established, this rate dropped to twelve out of every one hundred pilots killed.

Research and experience has brought about a better understanding of the physical requirements and standards necessary for flying. In the United States, the Aero Medical Association was founded for the sole purpose of studying and evaluating the results of research and experience.

Aviation medicine in its application to the individual who wants to be a pilot touches many branches of medicine, to wit, ophthalmology, otology, rhinology, psychiatry, neurology, physiology, psychology, and general medicine.

There are four classes of pilots: student, private, commercial, and glider. The commercial rating includes the airline pilots and the trainees of the colleges, who are potential military flyers. There are definite physical standards for each class of pilots. Each must have a physical checkup every three months, six months or twelve months according to his classification.

In the physical examination of a pilot the first part examined is his eyes. A phorometer (see figure 1) is used for this test. All military pilots must have visual acuity of 20/20, Snellen type, in each eye separately without a correcting lens. In commercial aviation correcting lenses are allowed. There must be no diplopia in any position for the higher grades, but for the lower grades some is permissible if it is corrected by lens. There must not be more than one diopter of hyperphoria for the higher grades. More than one diopter is allowed for the lesser grades. There must be at least three diopters of abduction and six diopters adduction. They must read at least V 1.00 on the brown, white and green card furnished by the Civil Aeronautics Board at eighteen inches. Color vision is tested by the Ishihara, Holmgrens, Jennings, Stillings, or Williams tests. Each pilot should be able to distinguish the dominant colors and hues. The field of vision is tested by the finger and fixation test. If any contraction of the field is apparent, the perimeter should be used. The lids and eyeballs are inspected, the pupillary reaction determined, and an ophthalmoscopic examination of the eyeball made. Strabismus and nystagmus are disqualifying for all grades. Students taking flying in the Army and Navy are tested for esophoria, exophoria and right or left hyperphoria. The ears are inspected to see that the ear drums are intact and that there is no middle, internal ear or mastoid disease. The whispered voice should be used to test the hearing in each ear separately at a distance of eight feet or more. The eustachian tubes should be patent.

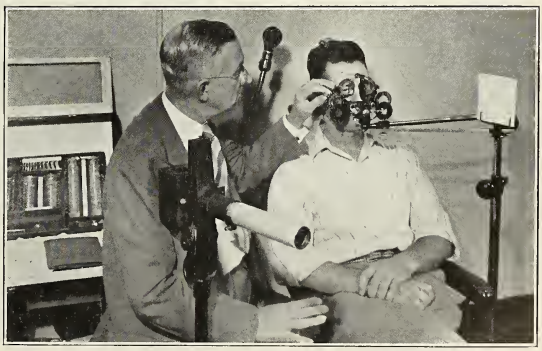


Figure 1

Phorometer used for testing vision, esophoria, exophoria, right and left hyperphoria, abduction, adduction, and accommodation.

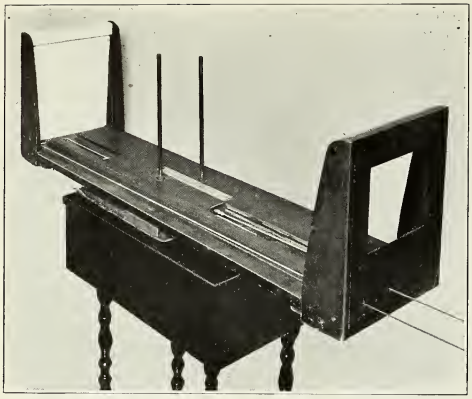


Figure 2

Howard Dolman apparatus for testing depth perception.

Depth perception is very essential for a pilot. The Howard Dolman apparatus is used for this test. (See figure 2.) This test is used to determine whether a pilot can judge distance in take-offs and landings and in formation flying. The applicant is placed twenty feet from the apparatus. He is placed so that he can look through the opening in the end and is unable to see the top of the two rods. The apparatus should be illuminated so that there are no shadows. One rod is stationary and the other is attached to a block that has a cord fastened to each end of the block. This block is movable by pulling the cord forward and backward. There is a scale fastened to the stationary block that is marked in millimeters. He has five trials to set the movable post opposite the stationary post. He is allowed thirty millimeters variation either way.

The nose should be free of any malformation, disease or obstruction that interferes with breathing. The septum should be intact.

The mouth, including tonsils and teeth, should be free of disease.

The equilibrium is tested by three trials of the self-balancing test by using the right and left foot separately and is recorded as steady, fairly steady, or unsteady.

A medical history is taken with special attention being given to asthma, rheumatism, malaria, operations and injuries. The head is examined for persistence of the anterior fontanelle and depressed fractures. The neck is examined for thyroid derangement, torticollis and adenitis. The chest is examined for malformations, deformities and contractions due to disease or injury. The spine and pelvis are examined for curvature, deformity or malformations. The extremities are examined for deformities, paralyses, amputations, ankylosed joints and edema. The general build and appearance should be noted. The lungs are examined by the ordinary methods, inspection, palpation, percussion and auscultation. Practi-



Figure 3

Schneider Index Test

First step: Taking reclining pulse and blood pressure of applicant.

cally any abnormality of the lungs is cause for rejection. The heart should be examined for size, murmurs and arrhythmias. For commercial pilots, the pulse and blood pressure are taken while sitting and after exercise, and the pulse is taken again at the end of two minutes. If it approximates the sitting pulse rate, the heart is considered in good condition.

A Schneider index test is given air line pilots and military pilots. (See figures 3, 4 and 5.) This test is done by having the applicant lie down for five minutes, after which blood pressure and pulse are taken and recorded; then he is asked to stand for two minutes, after which the blood pressure and pulse are taken; then he is asked to place the left foot on a chair eighteen inches high, keeping it there throughout the test. He then raises his right foot and places it beside the left foot and then returns the right foot to the floor. This he does five times in fifteen seconds. His pulse is taken at fifteen second intervals until his pulse returns to the standing rate. Each part of the test has a top value of three. Eighteen points is the most that can be made. Any score above eight is all right. If below eight, it should be done a second or third time. If the score stays below eight, he is disqualified. In pilots around forty-five years of age it is necessary at times to make an electrocardiographic examination.

The abdomen is examined. Any abnormal condition of the abdomen, including hernia, is disqualifying for the higher grades. Hernia, if supported by a truss, is permissible for the lower grades.

A chemical urine analysis is done. If albumin or sugar is found, a microscopic examination is made and a blood sugar test done.

Special inquiry should be made for nervous, mental disease, syphilis, epilepsy and the epileptoid equivalents (enuresis, stammering, dizziness,



Figure 5 (above)

Schneider Index Test

Third step: Applicant exercising by stepping up and down from stool after which pulse is taken.



Figure 4 (at left)

Schneider Index Test

Second step: Taking standing pulse and blood pressure of applicant.

convulsions, migraine, fainting, somnambulism and disturbances of consciousness). The examiner must look carefully for the following conditions: anxiety trends, elation and depression, irritability. These are considered pathological.

A personality study of the applicant is very essential. There should be a determined effort to find out if there is any deviation from the normal. That is to say, is the candidate's intelligence, volition and temperament in a normal channel? The facts ascertained in this part of the examination will come under four headings: first, intellectual activities; second, somatic demands; third, which is difficult to characterize, is that covered by the applicant's self-criticism and self-estimate; fourth, while hard to point out, may be referred to as the urgency or imperative to adaptation.

From the temperamental and personality characterization, individuals can be classified as one of the following types: effective extrovert, effective introvert, cognitive extrovert, and cognitive introvert.

The following characteristics should be found in a good pilot:

1. Intelligence—precise, alert, resourceful.
2. Volition—quick though deliberate, tenacity of purpose.
3. Temperament—cheerfulness, fondness for people, good cooperation in every way, sportsmanship, enthusiasm, frankness and adaptability.

The following characteristics denote an unfavorable class:

1. Intelligence—vague, hesitant, untrained.
2. Volition—facility of purpose, slow, impulsive.
3. Temperament—vain, loquacious, careless, frivilous, irritable. The applicant should be classed according to the qualities which predominate.

His peripheral circulation, coordination, station, gait, patellar reflexes and psychomotor tension are taken. The presence or absence of tremor is noted. Also his use of alcohol and drugs is determined.

Women pilots are questioned concerning their menstruation and are cautioned not to fly three days before or after the menses.

Flying is an occupation that requires top-notch physical condition. Pilots should be tested by physicians who know the conditions that confront a pilot while in the air. Flyers are best tested by flight surgeons.

MEDICAL DEFENSE

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The newer concept of war necessitates changes in the medical point of view concerning war. Until the past twenty years, the medical and allied professions thought of war largely in terms of caring for and repairing damage to the sick and wounded.

The concept of total war necessitates the concept of total defense—a complete effort of the entire populace not only for resistance but toward unassailable strength.

There is no evidence in recorded history that would indicate that any nation has ever risen to great strength or retained a strong position or developed human liberties without dynamic, aggressive action. National strength is calculated in terms of man power, armaments, munitions, industrial plants, supplies, transportation, and food. Man power comes first, because without adequately trained, organized, intelligent, healthy, determined man power, the other elements are entirely unusable. It will avail us little to build military machines and great industrial establishments for defense if our people lack the will, the intelligence, the health and the moral stamina necessary to use them effectively. Man power is the phase of the defense program that is largely the responsibility of the medical profession and this problem concerns not only the combat elements of our people but must consider the total population.

At the moment our nation is preparing a vast defense program. The government has called in certain experts to assist in the development of this program. Industry, labor, agriculture, transportation and consumers are represented, and ably so, but obviously to the present time no considerable thought is being given by properly qualified experts to the application of medical and public health science as these apply to our defense problems.

Why a defense program at all, if it is not on behalf of the total population of this country? The physical fitness, freedom from preventable disease, the moral and mental stamina of all the people will be the entire determining factors of the effectiveness of the whole program. Thus, the health problems of the military and civilian population are inseparable.

We must all be keenly aware of the fact that at present we are wholly or partly dependent upon foreign sources of supply for certain of our strategic materials—opium, quinine, synthetic chemicals, surgical instruments, optical glass, to name only a few. It is a matter of vital necessity that steps be taken at once to remedy this condition.

Are these essential materials any less important than battleships, airplanes or tanks?*

There are literally thousands of federal, state, municipal, volunteer and private agencies, not to mention the universities and the endowed foundations, for the study and promotion of health in this country that are uncoordinated. In the federal government alone these agencies are scattered through almost every department—War, Navy, Treasury, Labor, Interior, State, Social Security, to mention only those that come to mind.

In each of the forty-eight states the conditions are likewise untenable because of lack of coordination. The vast plant of volunteer and private hospitals, research institutions, nursing agencies, etc., are unorganized in so far as any program of national defense is concerned. Thus, it becomes a matter of most urgent necessity that all of these agencies be coordinated at the earliest possible moment as a first step in the national defense program.

In so far as the problem applies to our own state, each physician must become a teacher; he must spread the gospel of "ideas and ideals to enthuse our people and to give them fortitude to face the years ahead. They will need to have faith in their future. He must act quickly to restore the morale which has been shaken by the rapidly moving events overseas. Each of us must teach our people to adopt a long term view of life so that they will not succumb morally to the thought that catastrophe of the day may bar the roads to the future."

Among the first problems is the segregation of necessary personnel to keep in proper operation our hospitals, public health activities and the medical schools. Medical students must be kept at their studies, for we shall need to maintain the supply of trained physicians.

In case of general mobilization, it will require about 7500 medical men per million of enlisted personnel and these should be so drawn as not to cripple the services of our civilian needs. This means, of course, complete statistical records of all medical and allied groups, such as dentists, nurses and technicians of all kinds.

Consideration should be given to some courses under University auspices for the intensive training of technicians in some of the various technical fields where shortages of properly trained persons may exist.

Careful surveys should be conducted regarding hospital facilities and plans made for possible emergency expansion of such facilities. This may be urgently needed in case of epidemic, such as the pandemic of influenza of 1917-'18. Such epidemics are always a threat. The whole problem of communicable disease and compulsory immunization for certain diseases needs to be carefully considered.

It would seem proper for our Committee on Industrial Health, in cooperation with the Bureau of Industrial Hygiene of the Indiana State Board of Health, to give thought to the elimination of preventable disabilities in skilled workers. We are all well aware of the lack of skilled workers in industry and the vital need for every one of them in an emergency program.

All people entering specialized training of any form should have careful examination to assure their ability to use the training they receive. It would be most short-sighted to waste expensive training upon an individual who breaks down with a disease process that could have been discovered easily.

It would seem practicable to standardize many medical and surgical procedures so as to make their application easier and reduce the waste and lost motion of a multiplicity of methods and techniques.

We are becoming increasingly aware of the problem of nutrition and its bearing on the general health of people. It is vitally necessary that this subject be given thoughtful consideration in the light of our newer knowledge, especially with regard to the new concepts of protein, vitamin and mineral metabolism. Nutritional studies are most essential in that portion of our population of the marginal and lower economic levels.

Much needs to be done to correct remediable defects in workers. This is a large field that has hardly been touched. These people are all going to be needed in a plan of total preparedness. Likewise, the segregation of the unemployables who are suffering from non-remediable or mental defects has been given little or no consideration.

I have listed only a few of the innumerable problems with which we are confronted in meeting the challenge of a new and utterly different world order. In so far as the immediate needs are concerned, I would suggest the enlistment of aid from every possible source, especially the staffs of our universities and colleges.

As I have stated elsewhere, this job is going to require an heroic effort of the collective will and leadership of the highest order, leadership that has vision, imagination and courage; leadership that can hold the confidence and backing of an united people.

HAVE YOU COMPLETED AND MAILED YOUR A. M. A. QUESTIONNAIRE? IF NOT—

DO IT NOW!

* This communication was written in June and was submitted as a memorandum to the headquarters office. Since that time, a vast amount of work has been accomplished tending toward the solution of some of the problems in the Medical Defense Program.

REGISTRATION REQUIRED*

ROBINSON HITCHCOCK
Executive Officer
ADJUTANT GENERAL'S OFFICE
State of Indiana

For the information of your association, I desire that you have this general outline of facts as they appear today in Selective Service planning.

After the President of the United States issues a proclamation, the Governor in turn will issue one to the people of Indiana. A day will be designated as Registration day on which all male persons in a certain age group will be required to register. These registration cards will be turned in to the respective county clerks who in turn will deliver them to a local board which will consist of not less than three (3) members.

MEDICAL EXAMINERS FOR LOCAL BOARDS

I will talk first of the *local board* to which a medical examiner will be attached.

The Governor should give final approval to all appointments to Local Boards before they are submitted to the Director of Selective Service. The State Executive is responsible that the membership of each Local Board is complete and ready for submission to the President not less than three days prior to registration day.

In collaboration with the Governor and such agencies and individuals as he may authorize, the Executive will prepare the list of members of Local Boards. The prospective members will be notified of their tentative selection by wire and requested to accept or decline within twenty-four hours.

Conferences of members of Local Boards should be held prior to registration day for the purpose of instructing them in their duties. If practicable, the conference should be held in the capital, or some centrally located city in order that the Governor and other Selective Service officials may attend. This will give the personal touch and contact to the conferences. All Local Board members should be urged to attend. At least one member of each Local Board should be required to attend.

Members of Local Boards should be chosen from the standpoint of their environment rather than their professions or callings. Neither legal nor governmental training is the essential qualification. Rather an intimate knowledge and appreciation of all varieties of local conditions require a composite board of capable, reputable and representative citizens having different careers and experiences; men who, by reason of their intimate and diversified knowledge of local conditions within the Local Board area, should be the best judges of the equities of the law in its application to their neighbors.

The Local Boards are charged with the actual work of selection of men for the armed forces. On the manner in which they perform this exacting duty will depend the success of Selective Service in their area; and the cumulative effect of their services will determine the fate of Selective Service in the State. Therefore, every effort must be centered on this unit of the system, not only to maintain a high quality of personnel but a high standard of output.

On the Local Board rests the responsibility of deciding, on the merits of each individual case, who is to undergo the perils of war and who is to remain at home in comparative safety. Since certain ones who go to war make the supreme sacrifice, this is decidedly a heavy responsibility and not one to be accepted willingly or lightly. The duties of the Local Board are arduous. They are assailed by every conceivable influence. Very human and intimate problems are bared to them by the stream of humanity which passes before them. Every effort should be made to obtain men of unquestioned patriotism, fair-mindedness and integrity, men who are impelled solely by the spirit of self-sacrifice but who at the same time have a broad and sympathetic understanding of human problems. *These men must be chosen without regard to political, religious, or other affiliation.* It is essential to the success of the Local Boards and to the success of the Selective Service system that these men command the confidence of their neighbors by their fairness and impartiality.

The present regulations permit the widest latitude in choosing Local Board members in order that each State may choose citizens in each Local Board area best fitted to perform the duties of Local Board members. In some communities, such as those with a large negro or foreign-born population and in isolated districts, it may be highly desirable to appoint the sheriff as a member of the Local Board in order to lend it the force of his authority. Whether or not the sheriff should be appointed to the Local Board in certain localities and the communities in which he should be a member is a problem for each State to determine so as to obtain the maximum results.

PROVISIONS FOR MEDICAL EXAMINERS

Now come the provisions concerning your Medical Examiners. In preparing the list of prospective candidates, the Executive should avail himself of the services of the Medical Assistant, the head of the Public Health Service in the State and the head of the State Medical Association. It is sug-

* Presented before a meeting of the M-Day Committee of the Indiana State Medical Association.

gested that an open letter be published to the medical profession of the State advising them of the opportunities for patriotic service as Examining Physicians and members of Medical Advisory Boards.

The Governor should give final approval to the list before it is submitted to the President. The list should be ready for submission not later than *one week* after registration day; *earlier*, if possible.

Conferences of Examining Physicians should be held during the week following registration for the purpose of instructing them in their duties. The nearest Corps Area Commander or Commandant of Naval District should be requested to detail, if practicable, one or more medical officers familiar with military physical examination to assist in the instruction of the physicians attending the conferences. The conference should be held in the capital, or some centrally located city, in order that the Governor and other Selective Service officials may attend. All Examining Physicians should attend.

The professional qualifications of the Examining Physicians are important to the extent that they must be able to give a thorough physical examination in accordance with the regulations. Physicians and surgeons, especially insurance examiners, are best fitted for this work. Their personal qualifications must be the same as for the members of Local Boards.

The office of the Examining Physician need not be in the office of the Local Board. It will probably be more convenient to examine registrants at the physician's office or some medical center where the necessary equipment is available. However, the State Headquarters may authorize such equipment as may be needed and additional office space in the office of the Local Board.

One Examining Physician, to be appointed by the President on the recommendation of the Governor, shall be assigned to each Local Board.

Should the services of additional Examining Physicians be necessary, a Local Board may designate and utilize the services of such physicians.

All Examining Physicians shall be required to take the oath as prescribed. This oath, when completed, will be sent to the Governor of the State for file.

Examining Physicians are not members of Local Boards and have no vote on any question to be decided by such boards. Their report on physical examination of a registrant is advisory only.

Each Local Board shall maintain a minute book which shall contain the number of hours devoted by the Examining Physician to the work of examining registrants during the day. This is the only provision concerning compensation that I know about.

DISTRICT MEDICAL ADVISORY BOARDS

In regard to the Medical Advisory Boards for each Congressional District, it is provided that each Governor will sub-divide his State into districts for the purpose of organizing Medical Advisory Boards to assist the Local Boards in the determination of the physical qualifications of registrants. The number and size of such districts will be dependent upon the convenience of the registrants, communications and hospital facilities.

In each district thus created, the Governor will appoint a Medical Advisory Board, the members of which will take the oath as prescribed. The number of specialists appointed for each such board is not limited, but the minimum desirable would include one of each of the following: *Internist; eye, ear, nose and throat specialist; orthopedist; surgeon; psychiatrist; radiographer;* and *dentist.* Boards should be made as large as efficiency demands and circumstances permit. In those States and localities where it is impossible to organize a Medical Advisory Board with a complete personnel of qualified specialists, it is not expected that the Medical Advisory Board will be able to carry out the complete directions for the physical examination of those registrants who require it. In this emergency, provision should be made, if possible, for the registrant to be examined by competent specialists, who may not be members of Medical Advisory Boards.

Medical Advisory Boards will be ready to function 10 days after registration day.

Medical Advisory Boards are organized for the purpose of rendering expert professional opinions on doubtful points referred to them by the Local Boards. They are not required to make a complete examination of a registrant but only to examine the registrant and render an opinion on that part of the examination for which the registrant is sent to them. They exercise no original or appellate jurisdiction.

Members of Medical Advisory Boards receive no compensation. Office assistants *may* be authorized by the Governor.

MEDICAL DIVISION TO BE ORGANIZED

At State Headquarters there will be organized a Medical Division. This Division will be charged with all matters pertaining to the physical examination of registrants. It will supervise the work of the Examining Physicians and the Medical Advisory Boards. By instruction and inspection it will endeavor to obtain uniformity in physical examinations at the Local Boards and with examinations made at mobilization camps. In this work it will carry out the policies and instructions of the Director of Selective Service as issued from the National Headquarters. Within the State the Division will set up a system of medical inspection. The inspectors will not only visit the Examining Physicians but will also visit the mobilization camps to which the State has sent men in order to bring the work of the Selective Service examiners into agreement with the camp examiners as nearly as may be possible.

In its work this Division will receive the assistance and advice of the Medical Assistant and of the National Medical Inspectors from the National Headquarters.

The various sections of this Division are: The Physical Examinations Section; The Medical Inspection Section.

The Physical Examinations Section is charged with all matters pertaining to the appointment of medical personnel and the conduct of the physical examination of registrants. It will provide for conferences of Examining Physicians and members of Medical Advisory Boards. It will instruct medical personnel in the standards of physical requirements with the object of obtaining uniform results in the physical examination of registrants.

The Medical Inspection Section is charged with the medical inspection and investigation, where necessary, of the activities engaged in physical examinations. It will assist the Physical Examinations Section to obtain and maintain a uniform standard of physical examination of registrants. For this purpose, this Section will organize a *sufficient number of medical inspectors* to adequately cover the State, to contact the mobilization camps and to cooperate with the National Medical Inspectors.

We have not included a list of the necessary equipment for the physical examination of registrants by the Examining Physicians, but at the proper time this list will be available, and it consists only of those articles which are usually found in the equipment of every practicing physician.

This office appreciates fully the constructive aid which your association is giving and we want to assure you of our cooperation in your efforts on behalf of the State of Indiana.

ABSTRACTS

INJECTION TREATMENT OF HERNIA NOT ADVISABLE FOR GENERAL USE

A. M. A. Council on Pharmacy and Chemistry Advises the Method Should Be Employed Only by Especially Experienced Men

The injection treatment of hernia is not advisable for general use and should be employed only by those with special experience and with full understanding of the dangers involved, the Council on Pharmacy and Chemistry of the American Medical Association warns in *The Journal* of the Association for August 17.

The Council's statement confirms a previous opinion based on the results of a questionnaire which was sent in 1936 to a selected list of hospitals throughout the country in order to obtain information as to the extent of the use of the injection treatment for hernia, its safety and effectiveness, the incidence of unfavorable complications and the nature of these complications. To keep the Council's information up to date, the same questionnaire has been addressed again to those hospitals which replied to the first one.

After consideration of the second hospital survey and the reports in the recent literature, the report says, "the Council now concurs in the opinion that the method involves less danger of serious complications than surgery when employed only in selected cases of hernia by those skilled in the injection of suitable standardized solutions of known composition and action. The Council is not, however, willing to recognize any such solutions for New and Nonofficial Remedies until sufficient follow-up experience in their application has been gained to establish the success of the injection method of treatment. Present evidence indicates that better types of solution are to be desired."

TREATMENT OF BARBITURATE POISONING

Evacuation of the stomach and artificial respiration with inhalation of oxygen in case of difficult breathing should be instituted in patients who are in coma from barbiturate poisoning, it is pointed out in *The Journal of the American Medical Association* for August 17. The article is one of a series on treatment prepared by members of the attending staff of the Cook County Hospital, Chicago, and edited by the late Bernard Fantus, M.D. Dr. Richard Kohn Richards collaborated in the preparation of the barbiturate article.

Pointing out that the mortality rate from barbiturate poisoning may exceed 20 per cent, the article states that symptoms of poisoning generally continue for several days before death or recovery takes place. When the patient is admitted to the hospital in the stage of coma, evacuation of the stomach should first be performed, with the patient's head lower than the stomach. Enemas may be required, and these may consist of hot strong black coffee. Postural drainage should be maintained by elevating the foot end of the bed to tilt the bed from 15 to 20 degrees, the patient's feet being tied to the end of the bed if necessary and his head turned to the side. Secretions accumulating in the pharynx should be removed by suction. Feeding should be done through a stomach tube and should always be preceded by evacuation of the stomach's contents.

An important part of the treatment consists of liberal administration of stimulating drugs to counteract the depressant action of the barbiturates on the central nervous system. Picrotoxin and metrazol may be used for this purpose.

An important part of the treatment consists of liberal administration of stimulating drugs to counteract the depressant action of the barbiturates on the central nervous system. Picrotoxin and metrazol may be used for this purpose.

"Under no circumstances should one try to induce complete awakening, since this might lead to convulsions," the article warns. "The body temperature should be kept from falling below the normal level by the application of external heat with great care to prevent burns. In conditions of subnormal temperature, heat is the greatest of all stimulants. It is a requisite to permit medicinal stimulants to act properly, and it may prevent the lowering of resistance that favors the development of pneumonia. Constant nursing care is imperative to give these desperately sick and helpless patients their best chance for survival."

Medicine Today

"Be not the first by whom the new are tried, nor yet the last to lay the old aside."

GORDON W. BATMAN, M.D.
INDIANAPOLIS

Exercise is about the last thing most Americans need.

It is much better to have a patient walk properly using *two* crutches than to limp along on only *one*.

If the reduction of a fracture is not accomplished with comparative ease, the wrong method of reduction is being used.

Measurement of the lengths of the lower extremities, with the pelvis in true horizontal position, will disclose the cause of a *backache* occasionally.

A plaster cast is used to immobilize the area of its application, not merely to hide it from view. Considerable technique is needed. Most casts should be padded less, extended farther and less heavily constructed.

The *costs of accidental injuries* are usually greater in respect to the loss of time, the loss of future earning capacity, and in discomfort than in the so-called "high costs of medical care." Often more of the latter means much less of the former.

It is very easy to agree with the general conclusions of Walheim, who reports a study of 221 cases of "Tuberculosis of Vertebrae" from St. Goran's Hospital in Stockholm. He concludes that these cases should have an initial period of recumbency and study, with conservative care. This should be followed, when the activity of the disease has been brought to a standstill, by an operative spine fusion of the diseased and adjacent vertebrae. Mortality is definitely lower when the operation is done at this suggested period and the recurrences of active disease are almost eliminated when the case has been "protected" by a spine fusion operation, as compared with those cases unoperated. Spine fusion is preventive therapy for the convalescence and future of tuberculosis of the spine but it is not therapy for the active disease.

The therapy of certain neurological disorders by the induction of convulsive states has met with sufficient success to make its use rather widespread. A control of the severity of the induced convulsion is not accurate. Some of the convulsions are extreme and actually traumatic in degree. Many of these patients are in a state of general weakness. Compression fractures of the spine have been observed, Reed and Dancey reporting thoracic vertebral compression in 31.4% of 68 patients following a series of metrazol or insulin convulsions. Dislocation of the shoulder and rupture of muscles are other lesions noted. These lesions do not condemn the therapy as such but the possibility of skeletal injury should not be overlooked when the treatment is carried out. The paralyzing effect of Curare has been suggested and used by Bennett and others to eliminate this danger to the skeletal system.

Within recent years Ontario and Michigan have been visited by sizable epidemics of acute anterior poliomyelitis. We have a mild endemic form of the disease in Indiana. We may expect an epidemic within a few years. At this time there is no effective specific initial therapy for the disease. Orthopedic measures should be employed in these cases from the moment of diagnosis. There is a very distant limitation of the eventual paralysis in those cases which have had support and protection to the affected muscles from the onset of the disease when compared to cases where the diagnosis was made late or in which protective treatment was instituted late. Muscles which are temporarily paralyzed by the disease may be permanently affected by overstretching or over-use. As much as half the surgery needed to rehabilitate the polio victim is estimated as due to preventable contractures and deformities. It is well to be "polio conscious," hoping that we may be spared an epidemic in Indiana until we have available good direct therapy, but remembering that the patient should be protected from the *onset*.

A comparatively simple method of treatment has been developed within the past 10 years for delayed union and non-union of certain fractures. Although suggested 40 years ago, this method was popularized when reintroduced by Beck in 1929. Beck advocated the drilling of a series of channels through the ununiting area. The theory behind this suggestion was that fractures heal only when there is good blood supply and blood clot available in the presence of bone cells. When non-bone-producing tissue separates the fragments of a fracture, the gap cannot be bridged. The drillings create the proper ground substance for repair, simulating the conditions of a fresh fracture. The degree of success of this therapy depends on the character of the contacts of the fracture fragments, the circulation of the part as a whole, the success of the immobilization and perhaps others. In favorable cases

unions will be expected in a very high percentage of cases. Leydig reports a series of 330 cases of tibia fracture in which 8 delayed or non-unions occurred, all of which united after drillings had been done. Unpadded casts and walking irons are helpful adjuncts. This procedure should be employed whenever possible prior to the more extensive Onlay-Graft methods (Campbell) of treating non-union.

Injuries to the region of the shoulder have received added study since the publication of "The Shoulder" by Codman of Boston a few years ago. A recent report by Bosworth in the April 1940 *Journal of Bone and Joint Surgery* reviews 28 cases of injury to the musculotendinous structures about the shoulder joint. Of these cases, 4 represented complete separations of the encircling cuff from the head of the humerus. Two of these had undoubtedly occurred when the reduction of an otherwise simple anterior dislocation of the shoulder had been attempted without relaxing anaesthesia. (Of course this should not be done.) The majority of Bosworth's cases, 17 of the 28, were tears of the attachment or of the tendon of the supraspinatus. The suggestive symptoms are point tenderness at the greater tubercle of the humerus with pain or inability to carry out certain portions of the abduction range of shoulder motion. The pain is usually radiated downward over the deltoid area. Passive motion is often normal or at least much superior to active motion. In complete tears of the tendon the severity of the symptoms leads to early examination and diagnosis is not difficult. Occasionally other injuries overshadow the shoulder lesion and it is recognized late. Lesions of lesser severity are often seen late, too. Bosworth states that he sees little difference in the results obtained in those cases operated promptly and those operated after a moderate interval. The degree of the disability experienced by the patient is the criterion for operation of the tear or for resignation to minor permanent disabiltiy. In severe cases the patients are eager for relief and improvement. Repair of these tears is entirely possible and is followed by material relief and loss of disability. A wide exposure of the shoulder is needed as all parts of the area must be examined for associated injuries. The deltoid muscle is released from its anterior origins for the exposure. All of Bosworth's 17 operated cases showed satisfactory relief.

The *"Unsolved Fracture" of the neck of the femur* has made recent definite advances toward solution. This improvement dates from a revival of the employment of some form of internal fixation of the fracture. This procedure has a number of accepted varieties of technique but in all an anatomic reduction is an absolute essential part of the procedure. Better x-ray studies of the hip have been devised and the quality of the reductions obtained has certainly improved. Internal fixation was first reported in 1903 but it was 1935 before as many cases as 100 in a single year were submitted in reply to a questionnaire by the American Academy of Orthopaedic Surgeons to a nation-wide group. For 1936, 1937 and 1938, the case incidence leaped until in all 1485 cases were studied by this committee. In two-thirds of these cases a three-flanged nail was used as the internal fixation. Arthrotomy is being done less often, external x-ray checks of reduction being used instead. Non-unions occurred in only 16.4% against 30% to 50% in cases otherwise treated. Mortality was only 8.5%, in spite of the fact that the average age was 62. The low mortality rate can be assigned to the possibility of minor activity of the patient from the start of the convalescence. The usual post-operative restriction consists of traction to the affected extremity, a plaster shell for the leg and foot or pillow supports. The back rest can be employed promptly. The patient is usually confined to bed for a month or more but has virtual freedom of activity in the bed. Serial x-rays should be taken to follow the case and assist in the decision as to walking with crutches and with weight-bearing. The operative procedure is no more important than the proper conduct of the convalescence. Though the method offers much in this difficult situation, the responsibility of the care of such a case should not be assumed lightly. It is a highly technical procedure and the possibilities for trouble are many. That it offers a decided advance seems certain now.

CASE REPORT: SUBPHRENIC ABSCESS

MELL B. WELBORN, M.D.
CHARLES L. SEITZ, M.D.
EVANSVILLE

Subphrenic abscess is a rather uncommon and serious condition. In reporting a series of 111 consecutive operative cases occurring at the Massachusetts General Hospital, Faxon noted that there were 52 different operators responsible for the surgical treatment of these cases. Furthermore, these cases were collected during a period of 38 years. One can see from this report that the condition is not common and perhaps this accounts for some of the ambiguity that exists in the minds of some surgeons regarding its treatment. It most commonly follows operations on the appendix, stomach, duodenum and biliary passages. The mortality is usually high and has been reported in

the operative cases to be in the neighborhood of 38 to 50 per cent. In view of the relative rarity of this condition, its seriousness and not infrequently its difficulty of diagnosis, we feel that the following case report should be interesting.

CASE REPORT

Mr. E. R., white male, aged 62, was admitted to the hospital on May 31, 1940, at about 1:30 a. m. His chief complaint on admission was of pain in the abdomen of two days' duration. He stated that this pain had begun rather suddenly and that it was first noted in the epigastric region. He had been working in his garden at the time and the pain was so severe that it caused him to lie down before attempting to enter the house. He became nauseated, but did not vomit. He was seen by a physician who told him that he had acute indigestion and gave him a hypodermic, probably of morphine, and also some type of laxative which he vomited that evening. His pain continued to be severe and he began to vomit and grow weaker. At this time he called another physician who advised his admission to the hospital.

This man was a farmer who had always been in good health prior to this illness. He had never been seriously ill, nor had there been any operations or serious accidental injuries. At times he had noticed a slight burning in the epigastrium, following meals, which was relieved by soda. This had never been a marked complaint and he gave no history of vomiting or of tarry stools. He had been married for many years and his wife was living and well. There were no children. He had noticed a slight dyspnea on exertion for several years, but there had been no edema of the feet and ankles, no cough, and no precordial pain.

Physical Examination—The patient appeared to be acutely ill, but was rational and cooperative. He complained bitterly of generalized abdominal pain and held his abdomen with his hands. The pupils were round, active, and equal to light. There was no icterus. The thyroid was not enlarged and the trachea was found to be in the midline. The percussion note was resonant throughout and the breath sounds were well transmitted without any rales. His heart was not enlarged to percussion, the rhythm was regular, and no murmurs were noted. The abdominal level was one finger's breadth above the thoracic. There was marked generalized abdominal rigidity with rather marked tenderness in the epigastrium. Liver dullness was diminished or possibly absent. No abdominal masses could be palpated. There were no hernias. The prostate was moderately enlarged, smooth, and not tender. The external genitalia were not remarkable. The skin was clear and the deep reflexes were present and moderately active.

Progress—The patient's temperature on admission was 100.2° F., pulse rate was 130, and the blood pressure was 112 systolic and 80 diastolic. The hemoglobin was 95 and the white cell count was 9,500. His urine was straw in color, acid in reaction, and contained a trace of albumin, no sugar, a few hyaline casts, many pus cells, and a rare red blood cell.

With the history of sudden epigastric pain, associated with some shock, a rigid abdomen and marked generalized abdominal tenderness with a diminished or absent liver dullness, we felt that the patient most likely had a ruptured peptic ulcer. In view of the fact that the onset had occurred 48 hours before admission, and considering his rather poor general condition, we deemed it inadvisable to institute surgical treatment, believing that conservative measures offered a better chance of success.

The day after admission the patient's condition appeared to be improved. His temperature was 100° F., he had not vomited, the abdominal distention and tenderness were less, and his general condition seemed to be markedly improved. Conservative measures were continued and two days following admission the patient had a stool without an enema and appeared to be well on the way to recovery. On June fourth, four days after admission, the patient's white cell count was 11,000. He still had a low-grade fever, but he seemed to be gradually improving. At this time there was more tenderness around McBurney's point than elsewhere in the abdomen. The rectal examination did not show any fluctuation in the rectovesical space.

On June sixth, six days after admission, and the eighth day of his illness, the patient seemed to be a little worse and began to complain of pain along the right lower costal margin. His temperature at this time became elevated to 101° F. The white blood cell count was 12,100 and the differential count showed: 88% polymorphonuclears, 10% lymphocytes and 2% eosinophiles. In view of the fact that his pulse rate was rather slow in proportion to his temperature, a Widal was done which was reported negative. No malarial parasites were seen on the direct smear. The Kahn and blood Wassermann tests were reported as being four plus. On clinical examination we detected signs of thickening of the pleura at the right base, but no friction rub was heard. On June seventh an x-ray examination of the chest revealed hypoaeration of the right lung field and the roentgenologist thought that some fluid was present in the costophrenic sinus. The patient's temperature was 103° F., he became irrational, and his general condition was much worse. His abdomen remained moderately distended, but there was very little tenderness and no masses could be palpated. The morning of June eighth the patient was desperately ill, showing signs of peripheral vascular failure which gradually grew worse, and death occurred about noon, the tenth day of his illness.

DISCUSSION

This case is reported primarily to illustrate the difficulties in the diagnosis and treatment of subphrenic absceses. There is some question as to

whether or not we should have operated immediately on admission and made an effort to close the perforation which we felt must be present in either the stomach or duodenum. The patient's general condition was so poor that we felt conservative therapy offered a better chance of success, so this plan of treatment was followed. The patient improved rapidly for about six days, at which time he first complained of pleuritic pain in the right lower chest and showed signs of what we thought was pleurisy in this region. We immediately suspected that he had developed a subphrenic abscess and seriously considered operative intervention at this time. On the other hand, we were unable to localize it exactly and it was impossible for us to determine whether the abscess was in the anterior superior space or posteriorly. We felt that the history, suggestive of ruptured peptic ulcer, followed by a short interval of improvement and then followed by signs of pleurisy at the right base with sepsis, strongly suggested a collection of pus beneath the right diaphragm. It had been our experience in the past to note that most of these patients developed such symptoms and that they were frequently thought at first to be suffering with an early lobar pneumonia or diaphragmatic pleurisy. However, the decision to seek for the abscess was delayed, the patient suddenly grew worse and died before any intervention could be undertaken.

Autopsy Findings—Permission for autopsy was given, but was limited to the abdomen. This was opened through a long, right rectus incision. The incision was placed directly over a large abscess, the walls of which were formed superiorly by the diaphragm, medially by the right lobe of the liver, inferiorly by the transverse colon and greater omentum and laterally by the right side of the chest wall. The cavity must have had a capacity of at least two quarts, but contained only 200 cc. of dark brown fluid with a fecal odor. In exploring the abdomen further, we found a small, well-localized abscess about the appendix in the region of the right ileocecal fossa. There was also a small, well-localized abscess in the rectovesical space. Upon exploring further and breaking up the large abscess cavity, we found a perforated ulcer on the anterior wall of the duodenum just distal to the pyloric sphincter. This apparently had been sealed off by fibrin and plastic exudate. It was large enough to admit the tip of the index finger. The peritoneum and bowel throughout the remainder of the abdominal cavity appeared to be fairly normal in color and apparently had taken care of the infection quite well. The cause of death was listed as an acute perforation of a duodenal ulcer, subphrenic abscess, and abscess in the rectovesical space.

From the autopsy report it is seen that this abscess was located in the right anterior superior subphrenic space, and that it could have been drained very easily through a transperitoneal incision. The delay in this case was due to the fact that it seemed to be impossible accurately to localize the process, which we felt reasonably certain was present. The patient rapidly grew worse and died before any definite decision could be made as to his treatment. Subphrenic abscesses may exist for a long time before their discovery and are often not localized before the twenty-fifth day. It seems that this case illustrates that, in elderly patients who have been seriously ill from some concomitant condition, the condition may progress to a fatal termination much more rapidly, and that surgical treatment should be instituted without undue delay.

ABSTRACT

COMPLETE EXAMINATION OF LUNGS MUST INCLUDE USE OF X-RAYS

No examination of the lungs for disease can be considered complete unless it includes fluoroscopic or x-ray examinations to reveal conditions which may remain undetected by the usual methods, *The Journal of the American Medical Association* for July 13 states in an editorial on tuberculosis.

"A recent report by H. H. Fellows, M.D., based on serial chest roentgenograms of 3,179 office employees from 1926 to 1938, introduces interesting evidence regarding the pathogenesis of tuberculosis," the editorial says. "Fellows divided the group into those whose x-ray examinations showed (1) an average healthy or normal chest, (2) an apparently healed primary complex, and (3) a lesion requiring further study. In calculating the comparative incidence of the development of tuberculosis in the first two groups, the number of years of life under observation at each year of age was tallied by sex and note was made of the age at which tuberculosis was first detected. There were 2,536 persons in the average healthy or normal chest group and 449 in the healed primary complex group. Fifty in the first group acquired tuberculosis subsequent to this first roentgenogram; seven in the second group, whose first roentgenogram showed healed primary complex, also acquired tuberculosis.

"Thus it appeared that there was no greater tendency toward tuberculosis in those with healed primary complex than in those with chests roentgenographically normal. Moreover, it was clearly apparent from the entire study that apparently healthy working adolescents and adults frequently have conditions and diseases in the lungs which are unrecognized by the usual clinical examination and that an examination of the lungs cannot be considered complete without a fluoroscopic or roentgenographic examination. The latter conclusions have now been so thoroughly substantiated in numerous studies that they can be considered, for practical purposes, as clinically proved."

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DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA
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SEPTEMBER, 1940

Editorials

PLATFORM OF THE AMERICAN MEDICAL ASSOCIATION

The American Medical Association advocates:

1. The establishment of an agency of federal government under which shall be coordinated and administered all medical and health functions of the federal government exclusive of those of the Army and Navy.

2. The allotment of such funds as the Congress may make available to any state in actual need for the prevention of disease, the promotion of health and the care of the sick on proof of such need.

3. The principle that the care of the public health and the provision of medical service to the sick is primarily a local responsibility.

4. The development of a mechanism for meeting the needs of expansion of preventive medical services with local determination of needs and local control of administration.

5. The extension of medical care for the indigent and the medically indigent with local determination of needs and local control of administration.

6. In the extension of medical services to all the people, the utmost utilization of qualified medical and hospital facilities already established.

7. The continued development of the private practice of medicine, subject to such changes as may be necessary to maintain the quality of medical services and to increase their availability.

8. Expansion of public health and medical services consistent with the American System of democracy.

THE MILITARY MEDICINE NUMBER

THE JOURNAL presents herewith a special number devoted to military medicine. Your Editorial Board carefully considered the publication of such a number and also took counsel from Association members in various parts of the state. An endeavor has been made to cover the subject as thoroughly as may be done in a single issue of our magazine and your editorial staff hopes that its efforts will meet with your approval.

Each of the contributors in this issue is especially skilled in the subject upon which he writes, thus making for an informative as well as an interesting issue. Both the federal and state governments have made it definitely clear that this country is "preparing"—for just what eventuality is not made so clear. However, one need not be a student of national affairs to determine that the time has arrived when every nation on the face of the earth must seriously consider the problem of being prepared.

The various articles in the current number of THE JOURNAL present several phases of preparedness in a very graphic manner to the end that the reader may pause and ponder just what it all means. And, in the preparedness program, the medical profession of the country is asked to assume a very important role. Please note that we say "is asked." The request may be couched in different terms if we ignore it this time.

American Medicine does not choose to ignore the suggestion that we become a "prepared" profession; long before the Army, the Navy, the Marines and the Air Corps make the announcement that they are ready for whatever may present, American Medicine will be ready, too. Let there be no hysteria about this thing. Let every member of our profession calmly and thoroughly discuss with himself the question, "What can I do?" Having found the answer, let him offer his services in the manner outlined by our M-Day Committee. *Let's become prepared, and let's do it now!*

USE AND MISUSE OF DIAGNOSTIC APPLIANCES

For some time past there have been articles in our medical magazines concerning some of the more complicated diagnostic apparatuses, notably the electrocardiograph and the x-ray machines. The comment is to the effect that while these are more or less instruments of precision, they are primarily to be used by those especially trained in their operation. We believe there is much merit in these claims, particularly as regards the electrocardiograph.

One may readily learn how to operate one of these interesting devices and do a good mechanical job of it. The interpretation of the findings, however, becomes another thing. Some little time spent in cardiograph laboratories has shown us several

hundred recordings, but after it was all over we knew little about them. A long period of study is required ere one is competent to interpret the findings of one of these devices. This, of course, means that the amateur has no right to make a diagnosis from the recorded film.

Much the same thing is true regarding the use of the x-ray, though it is agreed that the x-ray is a most useful diagnostic aid in certain cases, even in the hands of the tyro. If there is a fracture of the long bone, for example, and the physician wishes to determine just what the pathology is, it is wholly proper for him to rely on his reading of the film he has taken with his machine. However, it is a different story when he undertakes to read a chest plate or a G-L plate, unless he has had special training in such matters. A good x-ray technician becomes "good" only after a long seance with x-ray films; too, he or she must understand the advantage of taking pictures from various angles, etc. But the big thing lies in the reading of the plates and even the "old timers" make errors in this regard occasionally.

The commercial manufacturer desires to sell as many outfits as possible, which is a truly laudable business ambition. We wish he might be able to put an electrocardiograph and complete x-ray equipment in many doctors' offices, but there is criticism on that point; our plaint is that while it is very desirable to have available every diagnostic means of merit, the operator thereof should have the necessary training to use them intelligently.

MEDICAL LEGISLATION IN 1941

With the coming of the 1941 session of the Indiana General Assembly, Hoosier Medicine begins to perk up a bit and ponder about what may come before that body in the way of proposed legislation affecting our profession. At the present time we have no notion of asking for any drastic changes in our medical law, our chief concern being those measures that probably will be introduced by those who are not friendly to medicine.

It is certain that the drugless folk will again ask that they be separated from the Indiana State Board of Medical Registration and Examination; already we have seen the draft of a bill that the chiropractors propose to introduce. Further, we have copies of the letters they have sent to all candidates for the legislature asking that these candidates pledge themselves in advance of the election. This letter is a very unfair statement of the facts in the case, for it overtly declares that the medical board has made it impossible for them to get anywhere.

There is not one word in that letter that would indicate that the chiros, in 1927, were highly in favor of the law which was enacted at that time, the signer of the letter being most active in pushing this bit of legislation, nor was there any particular objection raised to the injunction clause at that time. Now, however, there is a great furor being raised over that section, probably because two Richmond drugless practitioners have been enjoined from practicing in Wayne County.

Our legislative committee is seeing to it that all legislative candidates are fully advised as to what is going on and we are quite confident that this unfair campaign of the chiros will come to no good end. However, we must not only be on the alert, we must make it clear that Indiana Medicine can and will fight. The chiro letter referred to closes with the significant statement that "Indiana chiropractors are a militant group," leaving the inference that it would be well to do our bidding, or else!

Since 1897, when the present basic medical law was enacted, Indiana Medicine has, on occasion, been militant. We recall many legislative battles, some of which have gone down in medical history as "hot," and we have been uniformly successful in convincing Hoosier folk that the Indiana Medical Association stands for the best interests of Hoosier health.

All component societies are urged to answer every call of our legislative committee and to omit no step that will convince the members of the 1941 legislature that our Association wants no favors, that we are asking only for a common-sense interpretation of proposed legislation affecting public health and that the present laws serve their purpose to a high degree.

There is another consideration that it is well not to overlook: it is wholly within the bounds of possibility that by the time of the convening of the 1941 session, the State and Nation will be deeply engrossed in matters of far graver importance than the creation of new licensing boards. Nevertheless, it behooves us to be ready for any eventuality so that we may meet all arguments that may be proposed by the drugless groups, as well as by others who are interested in breaking down all medical law.

DON'T SIT ON THE FENCE!

The United States government is not at war with any nation; the great majority of its people are peace loving and wish to remain neutral now when more than two-thirds of the people on the face of the earth are engaged in the business of trying to destroy one another. It is our hope and our prayer that we may be able to maintain our neutrality, though we sometimes wonder if this can be done. That editors of other state medical journals are wondering about the same thing is evidenced by the numerous editorials appearing in their current issues. The editor of the *New England Journal of Medicine* (July 25, 1940), heading an editorial as "The Price of Security," says:

"The long and the short of it is that we do not like modern totalitarian methods of doing things. Neutrality or no neutrality, we distrust and dislike bitterly those

nations that employ such methods of achieving their ends. We may not be engaged in military conflict, but so long as we have reason to fear such nations, they are the enemy.

"The erasure of neutral countries and the collapse of France have cleared the air. There is no longer any question as to whether the United States will become involved. Economically we are involved, and the only way that we may possibly avoid being much more seriously, and perhaps disastrously, involved is by preparing swiftly, but intelligently, to defend ourselves against every type of attack. For this we must have courageous, far-sighted leadership; we must have an understanding of the problems to be met and the sacrifices to be made; we must have a logical program that we can understand and approve.

"The medical profession, as usual, will carry its share of the burden. Comparatively few of us will be called on to serve in the armed forces of the country. For all, however, there will be extra work to do, mostly of an unpretentious nature. We can all signify to our own leaders, by executing promptly the questionnaire that has been sent to us, our willingness to do the job for which we are best suited. We can all work toward improving the morale and the confidence of the nation, and for this task our opportunities are unexcelled.

Every member of the Indiana State Medical Association has received, through THE JOURNAL, a "call to duty"; he has been asked to fill out the "blue sheet" and mail it to the chairman of the M-Day committee, Dr. C. R. Bird, 23 East Ohio street, Indianapolis. Every physician in the nation has received from the American Medical Association a questionnaire as to what *he* or *she* can and will do, if and when.

Approximately one-third of our membership has mailed in the blue sheet at the time of this writing; forty-five per cent have answered the call from the American Medical Association; we must have a 100% response—hence this appeal.

We again remind our readers that during the World War I, Indiana physicians were slow in responding to the appeals of the Surgeon General for enlistment, and it was only after a short, snappy campaign that we did respond to a degree equal to that of other states.

We have information, not available for present publication, that the government of the United States is going to prepare for anything that may come, not only with munitions, ships and that sort of thing, but with man power; and man power means that the medical profession must be ready to render its share of service. The thing is definitely before us. Certain things are expected of us and the government has the right to expect these things—hence it is directly up to us.

This is no time to sit on the fence, undecided which way to go; your state and national societies have pledged the cooperation of the medical profession *one hundred per cent* and the federal government is counting on just that much. Sign and mail in that blue sheet to your state organization; sign and mail the American Medical Association blank; let's show the nation—yes, let's show the mad men of Europe—that American Medicine is right on the job!

"WELL, WHY NOT?"

The above caption is the title of the monthly message of R. G. Arveson, M.D., president of the State Medical Society of Wisconsin, as it appears in the *Wisconsin Medical Journal* for August. We quote liberally from the article, which we would like to use in full if space permitted.

"Every once in awhile someone has a new idea. Sometimes the idea affects a small group of people and sometimes it affects large masses of people. Adolph Hitler had a new idea when, with a spearhead movement, he cut the French line with a deep thrust. The French generals failed with the time-honored flanking movement. Could a new idea be used with success in the program of the annual meeting?

"I have had occasion for a number of years to attend the meetings of my county medical society very regularly, and I know from experience that the secretary, about two weeks before the meeting, calls upon two medical men of some repute to come and talk to us. Generally these men travel a distance of eighty to one hundred miles and sometimes farther. They usually talk upon a subject which is of special interest to themselves, their hobby perhaps. Ninety-seven per cent of the men go away without getting anything out of the talks, not that they are incapable of learning, but due to the fact that they are not interested in the subject. They are satisfied, of course, because it has always been so, is done so everywhere else. Anyone who dares to suggest some other type of program is put down as a lout. The whole procedure seems to be a rite in every sense of the word—like the ritual of a lodge or church service. . . .

"An active practitioner, called upon on short notice, and unless he is a teacher in a medical school, must almost of necessity talk upon a subject with which he is familiar. In many cases it is a rare condition and of no value to his audience. What the general practitioner needs and wants are the fundamentals of medicine; he needs them often and in large doses.

"Approaching the question of a change in the program of the annual meeting of course makes one apprehensive. To suggest such a thing, to suggest disturbing a time-honored procedure is to make one a candidate for that peculiar individual known as a 'nut.' However, I feel very little is gained by the average doctor attending such a meeting from the usual run of papers presented at such a gathering. Those invited naturally speak upon intricate subjects of special interest to them; that is, they usually do.

"The audience sits and swelters in the heat. I have often wondered just how much of value is obtained. Those specializing in diseases of the nose and throat, or in x-ray, etc., cram their efforts into a day and call it a job. Yet these men who specialize have their own journals, have their own meetings, and are in no way dependent upon a state society meeting program to, in many instances,

enlighten them. So, upon the whole, I believe that the average run of standardized medical meetings is a flop if you evaluate a meeting as a place to learn new and better things. . . ."

Dr. Arveson expresses many other notions as to what he believes medical meetings should be and asks for comment from the members of the Association; no doubt he will have many such replies as his suggestions are quite revolutionary. His comment likening the average medical meeting to a ritual or a rite seems to us to be wholly wrong. It is true that at times we have attended county medical society meetings where this observation might apply; on the other hand we recall scores of such meetings that were wholly without the "ritual." If a county society gets into a rut and its meetings are trite and wholly "ritualistic," the fault lies within the society itself.

When an average of more than a hundred busy doctors will sit for a period of two to three hours giving absolutely undivided attention to the speakers on a medical program, that society can hardly be called "ritualistic" and this very thing takes place in the Lake county society at every meeting. No, we can not agree with the gentleman from Wisconsin when he says, "the average run of standardized meetings is a flop."

Editorial Notes

With the completion of "Silvercrest," the new state tuberculosis hospital, Indiana has added 150 beds for these cases, making a total of more than 1,900 beds for tuberculosis patients in Indiana. The new hospital is located in the Floyd County Knobs area, overlooking the city of New Albany, a delightful spot for such an institution.

Occasionally we have wondered what has become of an old friend rather commonly met in medical literature—the echinococcus, who furnished the material for many good medical articles in times past. In the Mayo Clinic Staff Proceedings for May 29th there are three cases reported, two affecting the liver and one the kidney, the latter a rather rare condition, since less than three per cent of these cases are found in the kidneys.

It is gratifying to note that two recent numbers of Tice's International Medical Digest have abstracted articles published in THE JOURNAL. The April issue reviewed Robert G. Moore's "Heart Neuroses, Diagnosis and Treatment" (Jour. Ind. State Med. Ass'n. 33; 66; Feb., 1940), and the July number Jenning's and Mattill's "Collapse Therapy in Pulmonary Tuberculosis" (Jour. Ind. State Med. Ass'n. 33; 184; Apr., 1940).

Appearances indicate that a tousle-headed Hoosier from down Elwood-way may upset the political apple cart during the next few months. No, we are not making any predictions, nor are we doing any political proselyting; what we are getting at is that it does seem that this Willkie man is bent on conducting a presidential campaign as one never before was conducted. We *do* predict that we are in for the sight of our lives ere election day rolls around!

At the time of going to press, 1,870 of Indiana's 4,149 physicians had completed and mailed their A.M.A. questionnaire. This is 45 per cent—an average showing among the states. The greatest return has been reported from Nebraska, 71.4 per cent of whose physicians have returned their questionnaires. The average return for all the states is 43.9 per cent. If you haven't returned your questionnaire, *do it now!* We want 100 per cent of replies from Indiana, and it is up to you to do your part.

Time (July 15, 1940) carries under the caption "Judging Mind by Body" an excellent review of William H. Sheldon's recently published book "The Varieties of Human Physique." The article is a readable and understandable resume of present day conceptions of the constitutional factors in disease, but is seriously marred by more than half a page of photographs of body types that have no place outside of the pages of a strictly scientific journal. *Time* can offer no excuse for the publication of such pictures other than the desire to cater to the morbid curiosity of "the crowd."

Indiana seems to have done very well with her wheat crop this year. Farmers report an unusual yield said to amount to more than 27,000,000 bushels which is a lot of wheat in any state! Our chief interest in this at the present time lies in the fact that many of our diet faddists forbid the use of white bread, which of course lessens the demand for wheat flour. Hoosiers have been eating white bread for a good many years and have found it wholesome, and to have some faddist issue a "no white bread" order disturbs us quite seriously.

Seems as though some folks just have to have something to worry and fret about; if they find nothing in their daily lives to bring a visit from Old Man Worry, they just go out and hunt for him. This time it is a group of scientists who are

worrying about the missing elements. It seems there should be ninety-two of these things but a few of them never had been properly identified. Now that a Swiss chemist announces the discovery of the final element, thus making a complete list, we may again rest easy. As a matter of personal fact, back in our Hanover College days, we never missed a one, meaning that those already accounted for gave us enough trouble without worrying about those that were missing.

The Indiana Department of Conservation reports a marked increase in game birds throughout the state. Some of these birds, notably the prairie chicken, became almost extinct a few years ago. Thirty or forty years ago these birds were numerous in northern Indiana, but in recent years few of them have been seen. Now it is reported that they are readily found and a short open season is declared for next October. Hoosier medical nimrods are not unmindful of the work being done by the Conservation Department, not only in the matter of game birds but also in piscatorial affairs and in forestry. One of the satisfactory features of the whole program is that all this work is being done with little tax expense to Indiana citizens.

Peter Irving, head of the publication committee of the *New York State Journal of Medicine*, is somewhat perturbed at having received a letter from a member of that state organization in which said member refers to the official publication as "mediocre," and makes some suggestions to the effect that said member objects to paying five dollars per year for the magazine. We daresay every medical editor in the country has had somewhat similar experiences, since it is quite impossible to please every member in a large state society. In Indiana, however, we have the distinct advantage of a closer personal contact with our membership than is possible in a society so large as in New York State, and this contact obviates many criticisms such as that received by Editor Irving. But, after all, the life of the medical editor is not always a rosy one; we get plenty of criticisms—like to get 'em, too, if they are properly directed.

In at least three Indiana newspapers we have noted a wail from anglers because of the scarcity of "night crawlers." Every fisherman of consequence knows what "night crawlers" are and how utterly indispensable they are for certain types of fishing. Back in our Wild Cat days we were wont to use them on set lines; later we learned that they made excellent bullhead bait. Still later we used them when fishing for fiddler cats, down along the Ohio. But for star performance, we always recall a time when the bass were not "hitting," no matter what the lure. Having some "crawlers" with us on this trip, we knitted a large gob (and that is just the word for it) of crawlers on a Cincinnati bass hook of generous proportions, seeing to it that several ends were allowed to dangle from said gob and, boy! did they produce! We mourn with our downstate brethren over the fact that "crawlers" are scarce this year.

Douglas E. Scott, in the *Kentucky Medical Journal*, for August, 1940, discusses the "Treatment of Gonorrhoea in the Male" and the opening paragraph of his views affords material for much worthwhile reflection: "The best available statistics on the matter indicate that in this country 1,037,000 new cases of gonorrhoea reach medical attention every year. At least the same number do not reach medical care. There is just one other disease with a greater incidence, the common cold. And yet, let us be honest, gonorrhoea remains by us the poorest treated, most misunderstood of the ills of the human flesh, the stepchild—the redheaded stepchild of medicine." One interested in a very well prepared review of the present-day treatment of this disease would do well to read the entire article. Like the poor, gonorrhoea is always with us, and any new suggestions as to its management are readily accepted by the medical profession.

Delinquent narcotic registrants are liable to fine beginning July 1, 1940. "Any narcotic registrant who is delinquent for the fiscal year 1941, or any subsequent fiscal year, where there is no record of a previous delinquency, such delinquency will be considered a first delinquency and the collector should immediately suggest an offer of $5.00 without instructions from the Bureau." Greater penalties for delinquencies beginning with the fiscal year 1940 are suggested. "Attention is called to the fact that neither carelessness, oversight, nor ignorance of the law will be considered as a sufficient reason for waiving assertion of the specific penalty." It has been called to our attention that a rather considerable number of Indiana physicians are delinquent in their narcotic registration and since the penalty suggested is "For each additional delinquency . . . $10.00 . . ." it will be to your own advantage to make sure that your narcotic registration is up to date.

It's getting to be an old problem, this stream pollution control thing; we hear a lot about it and our legislative bodies attack the issue every little while, but stream pollution goes merrily on. This time the complaint comes from along White river, down Seymour way. Residents of this section charge that due to pollution of the stream by

industrial wastes at Columbus, thousands of fish are dying and the city of Seymour is beginning to fear that her water supply may become contaminated. As we often have remarked, our State Board of Health is doing a good job of trying to control such situations and we also realize that it requires a long time to bring about results, yet we are constrained to agree with down-state residents who are asking that something drastic be done about it. A demand is made that prosecutions be instituted; that probably would serve to convince the offenders that we mean business.

W. H. Brooksher, secretary-editor of the Arkansas State Medical Society, commonly known as the modern "Arkansas Traveler" because of his many peregrinations about his native state and elsewhere, pays the Hoosier state a very nice little compliment in a recent issue of the Arkansas magazine:

"June 16th. From Toledo along the muddy Maumee, the mecca of numerous picnic parties today, struggling through the worst meal we can ever recall at Defiance, Ohio, into Shanklin's beloved Indiana, serenely beautiful and quiet in what we would call early spring. Why Hoosiers love the place so well may be answered by but a short motor trip across the countryside in any direction. Every Riley lover owes himself at least a day of contemplation alongside the road as it crosses valleys and sloping hills. Into Terre Haute for the night, detours to the right and left of the main street, but eventually reaching the comfort of the Deming, favorably remembered from a stay in 1934."

Brooksher is well known as an epicure and we readily can imagine him when he sits down to a repast not to his liking. However, we cannot understand why any man who travels about as much as this chap does not have Duncan Hines' little volume with him!

The Indiana History Bulletin of a few weeks ago carried a story about the straightening of the Kankakee river many years ago. It had been determined that such an operation would restore to agrarian use several thousand acres of valuable land, and thus justify the outlay of thousands of dollars for the dredging operations. Something like 160,000 acres of land were drained over a period of years at a cost of two dollars per acre. However, it soon was found that the soil was of a very shallow depth and that with a year or two of cultivation it proved to be of no further value for farming purposes. Now it is proposed to restore the river bed as it was originally, thus providing a game cover and refuge of such proportion as again to bring to northwestern Indiana a veritable happy hunting grounds. The bulletin further observes that several colonies of beavers are materially assisting in this work, for they already have built two or more dams of considerable proportions which have resulted in the flooding of several hundred acres of land.

With the passing of Dr. Austin A. Hayden, of Chicago, Indiana Medicine loses a stanch friend and ardent admirer. We recall no out-state physician who more often attended the various special meetings we have held in years past, and often Dr. Hayden has been heard to say that he "liked to come to Indiana, the state where they do things!" And, too, he was a good friend of THE JOURNAL; he boasted that he read every issue "from cover to cover." After years of service as treasurer of the American Medical Association, he was named as secretary for the Board of Trustees in which post he had made a most enviable record. His faith in his profession was unbounded and he ever was seeking new channels in which he might be of service. In recent years he was very active in a national association for the hard of hearing and at the time of his death was planning to attend a meeting of that group in California. We shall sorely miss this man and there will be many times when we will wish we might have the sage counsel which he was always ready to give.

During the first six months of this year Indiana traffic claimed 519 lives, 89 more than in the same period in 1939. And this notwithstanding the continual improvements in our highways and an increase in the number of state police! Further, there is an ever-increasing effort to instruct Hoosier motorists in the art of being careful when driving. We noted a few days ago that in State Road 37, from Martinsville to Paoli, a road filled with numerous curves and some of them highly dangerous, there has been a marked improvement in the accident record since the Highway Commission had marked the curves with signs showing the speed at which they could safely be taken. But at many points over the state we are having an increase in traffic accidents. Analyses of many of them show the same degree of carelessness in observing traffic rules. Only the other day, during a trip to Fort Wayne, there were noted some half dozen violations of the rule requiring all motorists to stop before crossing or entering upon an arterial highway. We are still of the opinion that enforcement is the answer to the problem, rather than the enactment of a lot of new laws. We need more Bartholomew county judges in Indiana!

Hospital and health insurance, long a question much discussed in medical economic circles, is now in effect in several Indiana communities, chiefly in the more densely populated centers. In Lake County, for example, numerous of the larger industries have given their official approval to the plans and large numbers of their employes have taken advantage of them. The medical profession as a whole seems to have approved such a plan

and are now cooperating with the insurance companies. However, there is a tiny fly in the ointment, for there are loopholes in the plans adopted that would seem to permit of practises that are not wholly regular. As we interpret the insurance policy, there is nothing to prevent the insured from taking advantage of the fact that his policy may cover the entire family. This *might* mean that the insured awakes to the fact that it *might* be a good plan to have Johnny's, Mary's, and Jimmie's tonsils removed, even though there may be no immediate indication therefor. But, as he *might* reason, who knows when the school nurse shall issue the edict that these little glands are a menace to their wearers, hence they should come out? "Preparedness," you know, is quite in order these days! Thus, if the attending physician is a bit susceptible to persuasion, it is wholly possible that some unnecessary surgery *might* be done. Such things could happen; in fact, we are told by insurance companies interested in this sort of program that such things do happen.

On several occasions we have commented upon unnecessary noises in hospitals; hence the following copied comment in *Northwest Medicine* for June, 1940, seems very much to the point. It is evident that the lay writer had been a patient in a hospital that was lax in the matter of suppressing noises of various sorts, and the editor of *Northwest Medicine* commends the remarks for the attention of every hospital superintendent.

"In this business world, when a product ceases to give consumer satisfaction, or when an organization ceases to provide a service that meets with popular demand, both start to slip. The public wants service, it wants what it feels it is entitled to receive for the money it pays.

"Now, we do not wish to infer that our hospitals charge too much, or that they indulge in any dangerous practices, for such is not the case. Our criticism of local hospitals has to do with those little things that make or break an institution in the eyes of the public.

"Our hospitals are noisy, far too noisy. Too frequently nurses bang through doors, and we do mean bang. These same angels of mercy are most careless in the handling of dishes and pans. The noise is nerve racking to the sick and disturbing to the ill; in fact noise, noise and still more noise is driving paying guests from some hospitals and earning a reputation for these local institutions that is far from desirable.

"The voice of complaint is rising higher among those people in our city who can afford to enjoy hospital service, and this is bad, for a little more care on the part of hospital management could correct the situation to the mutual benefit of all. And this is our tip to all of our hospitals: within your four walls live up to the sign on the lawn outside, which reads 'Quiet, Hospital.'"

THE JOURNAL extends a hearty welcome to a newcomer in the field of scientific publications—*The Quarterly Journal of Studies in Alcohol.* Since publication of the *British Journal of Inebriety* has been discontinued, the new magazine becomes the only scientific periodical in the English language devoted solely to problems of alcohol. Its editorial board of twenty-one members includes physicians, physiologists and scientists of national reputation. It is gratifying to find the School of Medicine of Indiana University represented by Professor Rolla N. Harger. The high quality of the publication is attested by finding such names as Yandell Henderson, Abraham Myerson, Andrew Ivy and Norman Jolliffe among the contributors to the first number.

The problems of alcohol and alcoholism are numerous and varied. The physician "views with alarm" the increasing use of alcohol, particularly by women and adolescents in the so-called upper strata of society. The admixture of alcohol and gasoline has made our roadways more dangerous than our airways and presents a constantly increasing hazard to everyone who drives an automobile. It will be the purpose of the *Quarterly Journal of Studies in Alcohol* to discuss such practical matters as these, as well as to carry in its columns papers on the more abstract and scientific phases of the alcohol problem. It has been chosen as the official organ of the Research Council on Problems of Alcoholism recently created by the American Association for the Advancement of Science.

The sweltering, all too dry past few weeks have had one bit of consolation; when we get *too* hot and uncomfortable we think, "Oh, well, it won't be long now; in a few more weeks we'll be down in the foothills of the Cumberlands (meaning French Lick) enjoying the most pleasant of all the seasons of the year at the famous resort." So that is our Balm of Gilead these hot days. We are advised that the advance reservations exceed those of former years, which means a record-breaking attendance, and we know of nothing to prevent that. Our scientific program is a top-notcher; our guest list tells us that notables from all over the country will talk on the latest developments in medicine and surgery. The entertainment features are of a nature that will appeal to all of us—there will be something in which every one will be interested.

On the second day of the convention a military luncheon is planned. We've had military luncheons ever since the editor can remember, but this will be different! Every member of the Indiana State Medical Association who attends this convention is asked to be present at this luncheon. A noted speaker has been asked to address this luncheon group, on a subject that just now is commanding the rapt attention of the American people.

If you are not already assured of your accommodations, better write Tom Taggart, right now; he will be delighted to know you are to be one of his guests and will "put himself out" to see that you are properly looked after.

Medical Preparedness

I hasten to commend your proposed symposium in re National Defense and the Medical Profession, and to predict a prompt, enthusiastic and adequate response.

The Hoosier record in the first World War was second to that of no other State; and with the experience collated therefrom, adjusted to the streamlined plans of today, Indiana may be relied upon to "deliver" one hundred per cent.

CARLETON B. McCULLOCH, M.D.

Information filtering through regarding successes of the German Army shows that while their equipment is plentiful and up-to-date, there are no surprise weapons or methods. Flexibility, expert training and a thorough knowledge of the job to be done appears to be the outstanding factors.

The Medical Regiments in our peace-time forces are set up and trained to handle the tactical situation in the field, and the main function of the Medical Officers serving in the Army of the United States in peace-time is tactical.

When war comes and we really have casualties, the greatest skill in the medical profession will be called upon and needed—and we know they will volunteer, such as Base Hospital 32 that handled so many of my wounded during the last war.

I believe it is time that the Medical Profession give some thought to what their duties will be in an emergency. It is hard for many to subordinate themselves to discipline, which is absolutely essential in organizational work, but by organizing somewhat in advance they may be able to become more organization-minded.

ROBERT H. TYNDALL
Major General
Comdg. 38th Div.

From the report of the New York meeting of the American Medical Association, in executive session, Tuesday afternoon, June 11, 1940:

Dr. Edward R. Cunniffe, chairman, presented a report of the Reference Committee on Executive Session, which was adopted after discussion section by section and as a whole, on motions of Dr. Cunniffe, duly seconded and carried:

3. Resolution on Military Activities: The following resolution, presented by Dr. George R. Dillinger, Indiana, was considered by your reference committee:

Whereas, Worldwide social change, instability and a state of war exists among other nations; and

Whereas, These conditions threaten our nation and our American ideals; and

Whereas, The American Medical Association believes that national unity and a prepared national defense offer the best manner for defending our nation and the American way of living against these conditions; therefore, be it

Resolved, That the American Medical Association constitute and empower a committee to act in liaison with proper military and civil authorities and veterans' organizations to make a complete study and prepare a detailed program for medical coordination and preparedness in the event of M-day (mobilization day) becoming a reality, to the end that in such an event an unhurried and effective program will be established supplying first the medical needs of the military; second, the proper medical care at home during a military emergency.

Your reference committee wishes to congratulate the Indiana State Medical Association on its early consideration of medical defense and to recognize the value of its committee, which is already functioning and will be of great aid to the American Medical Association committee. It recommends the approval of the principles of the resolution.



F. H. Lahey, M.D.

The tradition of complacency is one of the most difficult ones to break down. When it has been bred and established in the minds of citizens of a country that its position as to defense is impregnable, that its history of past achievements in wars is unblemished, that its financial resources are unlimited, that its population is one of the greatest in the world, that its manufacturing productiveness is at the world's highest level, that its natural resources are the equal or the superior of most countries in the world, and finally that it is separated from all large and powerful countries by two large oceans, is it to be wondered at that complacency pervades the country? It is now trite to remind the American medical public of the penalties which have been paid by European countries for such a complacency. It is trite indeed to speak of the sad effects upon some of the European countries of political division, political bitterness and political selfishness. It is trite indeed to call attention to the fact that of what good are working hours, of what good are wage levels, what satisfaction is there in various labor arrangements if the country had its standard of living lowered by economic competition, or its labor dominated by foreign powers. One opens himself always to the possible criticism of being an alarmist by making some of the previous statements. Were they applied to the general public, this might possibly be

said of the writer. When they are confined, however, to such a relatively small, understanding, and well organized group as is medicine, this criticism should not hold. Medicine can always work a few extra and longer hours. No doctor has ever felt himself a candidate for limitation of his hours. Medicine can always give a little more of its time. Medicine has made sacrifices from its very beginning and will if there be an emergency, as there appears to be, make a few more sacrifices. Medicine has in the past few years been subjected to many unjust and undeserved criticisms. If it organizes itself for the immediate emergency as it has always met emergencies in the past, it will emerge even more appreciated than it has been in the past. It is distinctly possible that the times which are coming may serve as a boon in that the public may come to realize by our example what medicine can do and has done.

F. H. Lahey, M.D.

THE INDIANA NATIONAL GUARD

For many years a considerable number of Indiana physicians have been sufficiently interested in military medicine to devote appreciable time and effort in serving in the capacity of medical corps officers of the Indiana National Guard. These officers have been assigned to the 113th Medical Regiment or to the various regimental medical detachments of the 38th Division. In addition to a period of at least two weeks training in camp each summer, they have devoted one or more nights a week throughout the entire year, receiving medico-military training and instruction, as well as instructing the hundreds of Indiana's young men who serve in the various medical units in the state.

In addition to the valuable training and experience gained, these physicians have played an important part in maintaining a relatively high degree of physical efficiency of the entire personnel of the Indiana National Guard.

In many communities where National Guard units are located, it has been necessary to utilize the services of local physicians to examine the men and officers and to immunize them against typhoid fever and smallpox periodically. These physicians have become familiar with the regulations pertaining to the standards of physical qualifications necessary for entrance into the military service. This experience and training will serve them well in the event of any emergency requiring the processing of a large number of men to be called for military training.

The Indiana State Medical Association is to be commended for its foresight in providing a program for mobilizing the facilities of the medical profession in the state for any eventuality. Every National Guard Medical Officer heartily indorses this program and will cooperate in every way possible.

Franklin Tulley Hallam,
Colonel, Medical Corps, Ind.-N.G.,
Division Surgeon, 38th Division, and
Commanding Officer, 113th Medical Regiment.

MEDICAL PREPAREDNESS IN RELATION TO NATIONAL PREPAREDNESS

National preparedness—total preparedness—is the order of the day. Under such a program, the duties of the medical profession in advancing medical preparedness are obvious. The situation unquestionably has been accepted by the profession at large in the same spirit of patriotism and service which has characterized its actions in former emergencies. During World War No. 1, more than 30,000 members of the organized medical profession served with the armed forces in some capacity and approximately as many more served in a semi-military or associated civilian capacity at home.



Fred Rankin, M.D.

In the present emergency, the House of Delegates of the American Medical Association realized that a definite program prepared by the A. M. A. in cooperation with state and federal agencies would be advantageous, and to this end, a committee of ten under the chairmanship of Doctor Irvin Abell and with representatives from the House of Delegates in each of the nine military corps areas of the United States, was appointed. Ex-officio members from the central office of the A. M. A. and the board of trustees were added to this committee.

Meetings of this committee have been held and plans are under way for a survey of the entire medical profession against M-day. A questionnaire has been formulated and mailed to every licensed physician in the United States seeking information which will permit the allocation of each physician in the most advantageous manner. It must be remembered that this is a plan to secure service to the civilian population, as well as the armed forces. The first and immediate objective is the collection of this statistical data as represented in the questionnaire, and it is to this end that I vigorously urge you to fill out the questionnaire, immediately, and forward it to the headquarters offices of the A. M. A. State officers and county medical officers are urged to cooperate in this drive to the end that the Fifth Corps Area may

have 100% answers to this questionnaire. If you have not received a blank, or if for some reason the questionnaire has been lost, another will be available to you through the office of the chairman of your state committee on medical preparedness. Once this objective of statistical data is obtained, further problems will be enormously simplified.

Fill out your questionnaire immediately!!

FRED W. RANKIN, M.D.
Representative, Fifth Corps Area on the National Committee for Medical Preparedness

MEDICINE CAN POINT THE WAY

Nature equipped man with mind that he may the better direct his actions toward a unity with his fellows and their opportunities. In his own body man finds the pattern for the attainment of purposeful social organization; leadership arising from unity in purpose and in action. Mind is *not* a dictator, but *is* the unified voice of the millions of members of a true democracy.

In our time has come the test of man's capacity to take heed of his natures, and by them adjust to his realities, or be thrown backward into a primitive darkness. The test has rushed upon us with such speed that its very reality seems unreal, and in quiet moments we question the fact, as sometimes in a dream we reassure ourselves, "This is but a dream." But this now is hard, implacable reality: the *insanity* of dictatorships must be conquered and destroyed, or all that we are and all that we believe shall perish.

We of medicine live in the wisdom of the body, and the rightfulness of its natures; we believe in the democracy of our social life, and know that does it but follow the leadership of our inner democracy, the destiny of man shall be fulfilled. We are organizing and disciplining ourselves to do our part,—unity of purpose and finding the voice of leadership in the common voice of us all.

Your part?—Honestly, sincerely and quickly, fill out and return your M-Day questionnaire; and stand ready to serve as you may.

H. J. NORTON, M.D., *Secretary*,
M-Day Committee,
Indiana State Medical Association.

ALIEN REGISTRATION

As part of the national defense program, a nationwide registration of aliens will be conducted from August 27 through December 26, 1940, by the Immigration and Naturalization Service of the Department of Justice. Registration will take place in the post offices of the nation. It is expected that more than three and one-half million aliens will be registered during the four-month period.

Registration is made compulsory by a specific act of Congress, the Alien Registration Act of 1940, which requires all non-citizens to register during the four-month official registration period. The law requires that all aliens 14 years or older are to be registered and fingerprinted. Alien children under 14 years of age will be registered by their parents or guardians. When alien children reach their fourteenth birthday, they will be required to register in person and be fingerprinted.

A fine of $1,000 and imprisonment of six months is prescribed by the Alien Registration Act for failure to register, for refusal to be fingerprinted, or for making registration statements known to be false.

As part of its educational program to acquaint non-citizens with the registration requirements, the Alien Registration Division is distributing more than five million specimen forms listing the questions that will be asked of aliens at registration time. Besides the usual questions for establishing identification, the questionnaire asks the alien to tell how and when he entered the country, the method of transportation he used to get here, the name of the vessel on which he arrived.

He is also asked to state the length of time he has been in this country and the length of time he expects to stay. He must also describe any military or naval service he has had, and list the names of any organizations, clubs, or societies in which he participates or holds membership. In addition, he is required to describe his activities in any organization, and to affirm whether or not the organization furthers the interests or program of a foreign government.

To make their registration easier, aliens are being asked to fill out sample forms, which will be available prior to registration, and take them to post offices where they will be registered and fingerprinted. Every registered alien will receive by mail a receipt card which serves as evidence of his registration. Following registration, the act requires all aliens, as well as parents or guardians of alien children, to report changes of residence address within five days of the change.

The Alien Registration Act was passed so that the United States Government may determine exactly how many aliens there are, who they are, and where they are. Both President Roosevelt and Solicitor General Biddle have pointed out that registration and fingerprinting will not be harmful to law-abiding aliens. The act provides that all records be kept secret and confidential. They will be available only to persons approved by the attorney general of the United States.

Fingerprinting of aliens carries no stigma whatsoever. Thousands of citizens are voluntarily fingerprinted every year. Members of the United States Army and Navy are all fingerprinted, as are many government workers. In recent years many hospitals have established the practice of taking footprints of newly born babies. Because fingerprinting is the only infallible method of

accurate identification, the United States Government has adopted it as part of its registration program.

In signing the Alien Registration Act, President Roosevelt said, "The Alien Registration Act of 1940 . . . should be interpreted and administered as a program designed not only for the protection of the country but also for the protection of the loyal aliens who are its guests. The registration . . . does not carry with it any stigma or implication of hostility towards those who, while they may not be citizens, are loyal to this country and its institutions. Most of the aliens in this country are people who came here because they believed and had faith in the principles of American democracy, and they are entitled to and must receive full protection of the law."

Solicitor General Biddle adds, "We should remember that all Americans were at one time or another immigrants from other lands. The genius of many countries, the ancient aspirations of many races, have built into what is America. Unfortunately, there are some foreigners who are disloyal to America, who do not wish to accept our ways and who use our freedom of speech and of the press to foment disunity and sedition.

"These persons we will apprehend, but we will also see to it that loyal American aliens are not unjustly condemned for the disloyal behavior of a few. Our registration will be their protection from persecution."

The Immigration and Naturalization Service asks for the co-operation of all citizens in carrying out the alien registration program in a friendly manner so that our large foreign population is not antagonized. It is suggested that citizens may be of great help to their non-citizen neighbors or relatives by explaining to those who do not speak English well what the registration is, where aliens go to register, and what information they must give.

The Registration of Aliens program has been set up as a separate division of the Immigration and Naturalization Service. The program is being directed by Earl G. Harrison, under the general supervision of Major L. B. Schofield, special assistant to the attorney general.

AMERICAN RED CROSS PLANS NATIONWIDE ENROLLMENT OF VOLUNTARY BLOOD DONORS

The American Red Cross, acting at the request of the Surgeon General of the U. S. Army, has announced experimental plans for the promotion of a nationwide corps of volunteer blood donors which would become part of the national defense program, when and if needed.

Chairman Norman H. Davis, in announcing the proposed program, declared the plan would be to make available blood plasma to the U. S. Army Medical Corps in the event of emergency. For the past four years, he said, twelve Red Cross chapters have been furnishing whole blood from volunteers to hospitals for civilian use. The new program will be patterned along similar lines, using plasma instead of whole blood, it was explained.

The American Red Cross also has under consideration a parallel project to furnish voluntary plasma requested by the British Red Cross for the treatment of war victims, Chairman Davis said.

Details of this project are being studied, Mr. Davis said. Two possible plans are being explored, he added. Under the first the American Red Cross would gather voluntary plasma in the United States and fly it to Europe for transfusion purposes. Under the second plan, which Mr. Davis indicated seemed to be more feasible, the American Red Cross would send equipment and technicians to England to gather the plasma on the spot.

For the domestic program, a preliminary study involving 1,300 Red Cross volunteers in four cities throughout the country will be conducted under the direction of a special committee appointed by the National Research Council, Chairman Davis said.

Dr. William DeKleine, National Medical Adviser of the Red Cross, met in July with Dr. Cyrus E. Sturgis, of the University of Michigan, and with the Board of Directors of the Ann Arbor Chapter to lay plans for this enrollment project.

Dr. DeKleine held similar conferences with the three other blood specialists named by the Research Council. They are Dr. Everett Plass, of the University of Iowa; Dr. Alfred Blaylock, of Vanderbilt University, and Dr. Max Strumia, of Bryn Mawr Hospital, Philadelphia.

Dr. DeKleine said that the proposed plan for collecting blood was patterned after the blood bank idea except that the plasma will be used instead of whole blood. Plasma, he explained, is whole blood from which the red blood cells have been separated by centrifugal force, and is equally satisfactory in the treatment of hemorrhage and shock.

"Plasma," Dr. DeKleine pointed out, "has many advantages over whole blood. The latter can be kept only a few days because the red blood cells deteriorate very quickly. Plasma can be kept indefinitely, does not require typing, and can be moved about freely without any damage to it. It can be transported any distance and is therefore applicable in military as well as civilian practice.

"Preliminary studies must be made to perfect methods of collecting, storing and administering plasma under conditions comparable to war-time emergency. Blood for this initial study will be furnished by volunteers at the various hospitals where members of the Research Committee are regularly employed. The plasma collected will be stored and used as emergencies arise at these hospitals."

After these preliminary investigations have been completed, the Red Cross will then work out with the medical department of the Army plans for enrolling prospective donors in cities throughout the country where collecting centers will be established. In the event of an emergency, the Red Cross could start delivering plasma within ten days after enrollment is completed, Dr. DeKleine said. Blood so collected will be pooled in large sterile containers, to simplify storage, in sufficient quantities to meet the emergency needs for treating the wounded.

Recruiting donors will be conducted by a special chapter blood transfusion committee which will include leading local physicians. The technical phases of the project will be performed by the medical staff of the co-operating hospitals. They will examine the prospective volunteers and make the necessary blood tests as well as do the actual transfusions.

This blood transfusion project will be another step taken by the Red Cross in its preparedness program for national emergencies. It will function in close co-operation with the medical departments of the military forces, Dr. DeKleine said.

President's Page

MEDICAL PREPAREDNESS

The House of Delegates of the Indiana State Medical Association meeting at Fort Wayne last October unanimously voted to adopt a resolution, introduced by Dr. Norton from the Bartholomew County Medical Society, offering the whole-hearted support of this Association to the government for a defense program should the probability of a real M-Day become imminent.

At the New York meeting of the American Medical Association, the House of Delegates in executive session commended the action of the Indiana State Association and further offered a series of resolutions in which it extended to the government all the facilities of the Association including the records and personnel of the Chicago office. It also offered a voluntary abridgment of some of the personal rights of the individual physician for the duration of the crisis. Finally, it set up a Committee on Medical Preparedness to cooperate with the Advisory Commission on National Defense, the Army and Navy Medical Corps, the United States Public Health Service, and all other federal agencies in preparing our nation medically to meet any emergency.

In line with all this, the September issue of THE JOURNAL has been devoted to the subject of Medical Preparedness in the hope that the physicians of our state may be better informed concerning medical preparedness activities.

There is no desire on the part of anyone connected with this issue to create an artificial war hysteria, but it is the desire of all that a clear conception of the facts may lead to a stronger position both physically and psychologically, to meet squarely any eventualities.

When Japan seized Manchuria over the protests of France and Secretary of State Stimson, but with the approval of England, little attention was paid to the incident, yet that event led directly to the rise of the dictators. Comparatively little apprehension was caused by the Italian seizure of Ethiopia, the rearming of the Ruhr, or the seizure of Austria. The ruling powers in Britain felt a sense of security in the presence of a stronger Germany between Russia and France. Political instability and faith in the Maginot Line lulled France to sleep. The appeasement of Munich served to alienate Russia and the Balkans from the allies. In spite of promises to the contrary, Hitler marched steadily on in his unwarranted aggression. The late Senator Borah, a member of the Foreign Relations Committee, insisted there would be no war the day before Poland was invaded! Few of us believed that Denmark, Norway, the Netherlands, and Belgium could be taken with so little apparent effort. Still more astounding was the rapid destruction of France with her Maginot Line and what was believed to be the finest army in existence.

Now we have the battle of Britain, upon the outcome of which largely depends our national safety. Hitler has assembled the most powerful offensive force in history. His ambition dwarfs that of Alexander, Caesar, Napoleon, and Frederick The Great combined. He is unscrupulous, and fired with a limitless zeal to extend the power of an ideological form of government. He, together with the other dictators, has a supreme contempt for the efficiency of democracies. With the loss or seizure of the English fleet, with Japan and Russia standing by like coyotes waiting for the kill, it would not take great imagination to envision our own predicament.

Nothing but force will deter such aggression. As repugnant as militarism is to all normal Americans, it is necessary at this time to use all haste in the preparation of such defense to discourage attack from any and all quarters.

It is our duty as an organization to prevent a bottle neck to defense by lack of medical preparedness. It is also the desire of the organization to see that medical men are assigned to duties that they are most qualified to perform, and to secure the least possible dislocation of medical service for the civilian population.

Karl R. Rucksell

MANUAL OF MILITARY MEDICINE FROM THE REVOLUTIONARY WAR

If seeking a classical example of early Americana Medica, what more nearly perfect specimen could one hope to find than a book bearing a Philadelphia imprint, published in 1776, entitled *Plain, Concise Practical Remarks on the Treatment of Wounds and Fractures* particularly if the author bore the plain, concise, practical name of John Jones? Such, in fact, was the medical manual of the Colonial forces in the War of the Revolution.

The author was unusually well prepared to write such a book. He had a fine medical background. His paternal grandfather, Dr. Edward Jones, was a prominent Welshman who came with Penn to America. His maternal grandfather, Thomas Wynne, was likewise a physician. His father, Evan, had made a place for himself among the physicians of Pennsylvania, but had moved to New York before the birth of his son John. John Jones (1729-1791) began the study of medicine under Dr. Thomas Cadwallader, one of the most prominent men of his day, and after a year went to Europe where he pursued his studies both in England and on the continent. He went first to London and attended the lectures of William Hunter and MacKenzie. His closest association was, however, with Percival Pott who was the senior surgeon at St. Bartholomew's. It seems that Pott was Jones' guiding star and influenced him more than did any other of the men with whom he became associated.

In May, 1751, Jones went from London to France and obtained a medical degree from the University of Rheims. From Rheims he went to Paris and studied anatomy with M. Petit and surgery with LeCat and LeDran at the Hotel Dieu. In April, 1752, he left Paris and went to the University of Leyden and finally to Edinburgh.

Returning to America, he established himself in practice in New York City, devoting himself especially to surgery, and is said to have done the first lithotomy in New York and eventually gained the reputation of being particularly adept at performing this operation.

In 1755 he volunteered as a surgeon in the French and Indian Wars, remaining in the service until peace was declared. He then re-established his practice in New York, and when, in 1768, the Medical School of King's College was organized, he was made Professor of Surgery. His practice included some of the most prominent men of the Colonial period, Benjamin Franklin and George Washington having been numbered among his patients. He operated upon Franklin for stone and was remembered in Franklin's will. At the outbreak of the Revolutionary War he became a surgeon and worked in that capacity until ill health compelled his retirement. He died in his sixty-third year.

PLAIN CONCISE

PRACTICAL REMARKS,

ON THE TREATMENT OF

WOUNDS AND FRACTURES;

To which is Added, An APPENDIX,

ON

CAMP AND MILITARY HOSPITALS;

PRINCIPALLY

Defigned, for the Uſe of young Military and Naval Surgeons, in NORTH-AMERICA.

By JOHN JONES, M. D.
Profeſſor of Surgery, in King's College, New York.

PHILADELPHIA:
Printed, and Sold, by ROBERT BELL, in Third Street.

MDCCLXXVI.

The first edition of *Plain, Concise and Practical Remarks* was printed by John Holt in New York in 1775. The second edition, the title page of which is herewith reproduced, was printed a year later by Robert Bell in Philadelphia. It was the first American book on surgery and was, according to John Shaw Billings, the only medical book by an American author extant at the beginning of the Revolutionary War.

The book is dedicated to Jones' first preceptor, Thomas Cadwallader. It is little more than a pamphlet consisting of only one hundred fourteen pages. It contains but a single original case report, the remainder of the text being largely a compilation from foreign authors. The eleven chapter heads are as follows:

I. Of Wounds in General.
II. Of Inflammation.
III. Of the Division of Wounds
IV. Of Penetrating Wounds of the Thorax and Abdomen.
V. On Simple Fractures of the Limbs.
VI. On Compound Fractures.
VII. On Amputation.
VIII. Of Blows on the Head.
IX. Of Injuries Arising from Commotion.
X. Of Injuries Arising from Fractures of the Skull.
XI. Of Gun-Shot Wounds.

The appendix is merely headed, "Hints Concerning Military Hospitals." Its opening paragraph is a severe arraignment of "the misapplied benevolence of Hospitals for the sick and wounded."

For practical purposes this second edition of Jones' work was ordinarily bound with three other brief dissertations on military surgery published in the same year: "The Diseases Incident to Armies, with their Method of Cure, Translated

(Concluded on Page 496)

COME TO FRENCH LICK IN OCTOBER

French Lick Springs Hotel, in southern Indiana, site of the Indiana State Medical Association meeting October 29 to 31, presents thousands of acres of pleasant woodlands and green valleys for pleasure seekers of all ages.

Although far from the disturbances of the city, life at the spa is attended by all the comforts and conveniences of a modern home. Aside from such outdoor sports as golf and trapshooting, all activity takes place under one roof and guests' every need are provided for within the hotel.

Among the resort's most popular sport attractions is golf. Its two eighteen-hole courses are annually the site of major tournaments. The Hill course was planned by one of America's foremost golf architects, with putting greens and fairways completely tiled for drainage. Expert greens keepers constantly care for both courses.

A new $75,000 club house, embodying all the latest features for golfers' enjoyment, was constructed on the Hill course this season. Both the Hill and Valley club houses stock a full line of clubs and balls and rental equipment. Mel Smith, resort professional, is regarded as one of the outstanding golf instructors in America and is assisted by a competent staff of men capable of offering beginners or seasoned players the benefit of years of golf teaching.

Skeet and trapshooting are under the direction of Phil Miller, captain of the 1939 All-American Trapshooting team. Miller each year is a top-flight threat at the Grand American Trapshooting tournament and has captured every major title and championship at one time or another in his years of amateur competition.

The gun club is equipped with a club house where guests find relaxation after a joust with the clay pigeons. Miller serves as an instructor at no extra charge.

Miles of bridle paths through the foothills of the area make horseback riding a thrilling sport. An excellent stable of blooded Kentucky saddle horses, many of them gaited, add to the pleasure of this activity. The stable is supervised by a staff of expert horsemen who are available for private riding lessons or service as guides.

An outdoor swimming pool and men's and women's indoor pools are also popular. Other sports include tennis, archery, pitch and putt golf, badminton, pingpong and horseshoe pitching, all of which are complimentary.

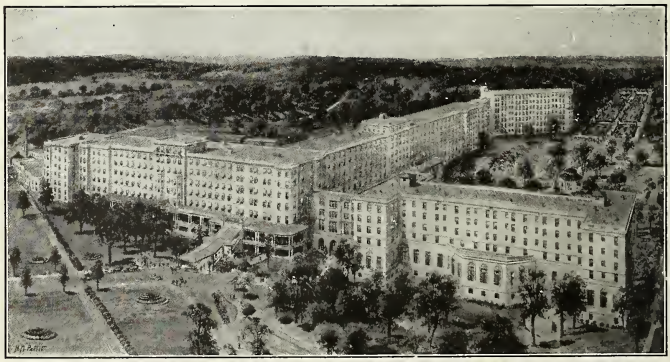
The health facilities at French Lick Springs are world-famous. Waters from the spa's three mineral springs are pumped directly to the hotel. The waters from Pluto spring are available in the Pluto buffet, at the spring, or in rooms at desired temperatures.

Separate bath departments for men and women are staffed by trained attendants under a physician's supervision. The most modern mineral baths and massage treatments are available in both departments at reasonable rates.

Added to the natural beauty of the estate are the formal and Japanese gardens and the spa's galaxy of parks and winding nature trails. These are second in popularity only to the spacious veranda which extends the entire length of the main hotel section.

Of interest to conventionists is the hotel's facilities for accommodating groups up to 1,000 delegates. One wing of the establishment is devoted exclusively to a convention building, complete with private guest rooms, meeting hall and display quarters. The convention building is reached from the main section without the necessity of going out of doors.

Rates at French Lick Springs are on the American plan, including meals. A Swiss-trained chef presides over the culinary department and the resort's cuisine is as famous as its sports and health facilities.



French Lick Springs Hotel

ANNUAL MEETING — OCTOBER 29, 30 and 31

CONDENSED PROGRAM

Annual Session of the

INDIANA STATE MEDICAL ASSOCIATION

October 29, 30, and 31, 1940

FRENCH LICK, INDIANA

Monday, October 28:

Meeting of state health officers
Meeting of Executive Committee

Tuesday, October 29:

Registration and opening of commercial exhibits
Annual golf tournament
Annual trap shoot
Council meeting
Meeting of House of Delegates
Annual dinner meeting for women physicians
Smoker and stag party

Wednesday, October 30:

Registration and exhibits
General meeting with these speakers:

ROY WESLEY SCOTT, M.D., CLEVELAND
CHARLES A. FLOOD, M.D., NEW YORK
NORVELLE C. LA MAR, M.D., NEW YORK

Fraternity, class and ex-service men's luncheons at noon
National Defense luncheon
Luncheon of Indiana Roentgen Society
Luncheon meeting of Regional Fracture Committee
Luncheon meeting of Section on Anesthesia
Meeting of Medical Section
Meeting of Surgical Section
Meeting of Section on Ophthalmology and Otolaryngology
ANNUAL BANQUET: Guest speakers, Frank H. Lahey, M.D., Boston, and Walter McCarty, managing editor of the Indianapolis News.
President's reception and ball

Thursday, October 31:

Meeting of House of Delegates (breakfast)
Meeting of Council
Second general meeting with these speakers:

JOSEPH M. HAYMAN, M.D., CLEVELAND
IRVIN ABELL, M.D., LOUISVILLE
NICHOLSON J. EASTMAN, M.D., BALTIMORE
JOHN STANLEY COULTER, CHICAGO

The ladies will be well entertained during this session. A preliminary note from Mrs. Dillinger follows.

To the Women!

October means French Lick and the State Medical Convention. Surely every doctor's wife in Indiana has marked October 29, 30 and 31 on her calendar for a second vacation trip to French Lick. The women of Orange County and Third District are busy making plans for "the big house-party" with a program you simply *must* not miss. Plan now to come and to bring your husband to join the party. Come early Tuesday morning. While your husband is playing in the golf tournament, you can play golf, too, or ride horse-back, play tennis, badminton—anything you wish. At four o'clock the Floyd County Auxiliary will preside at a reception honoring the state officers and the new auxiliaries. At seven there will be a dinner party for the women in the main dining-room of the hotel with entertainment, followed by informal dancing in the lobby and cards on the mezzanine.

Wednesday morning you'll have to tumble out of bed early for the Auxiliary Breakfast at eight-fifteen, but you can't miss it for Mrs. William Tinney, our State President, has planned a most interesting meeting. At noon there will be a luncheon followed by a trip to Spring Mill State Park where you will see not only the restored village but also the delightful new hotel. You'll return to the French Lick Hotel in time to dress for the banquet which will be held in the main dining-room. Dr. Frank H. Lahey, of Boston, president-elect of the A.M.A., and Mr. Walter McCarty, managing editor of the Indianapolis News, will be the guest speakers. At ten o'clock, the president's reception and ball will be held in the Convention Hall. So you see you'll *have* to stay "'till the ball is over."

Plan to come early and stay late. Orange County and the Third District assure you a most hearty welcome!

MRS. GEORGE R. DILLINGER,
French Lick.

IF YOU HAVE NOT MADE YOUR HOTEL RESERVATION, DO IT NOW! Write to French Lick Springs Hotel, French Lick, Indiana

CORRESPONDENCE

DR. BERKOWITZ AND BRIG.-GEN'L. RYAN WOULD INCREASE NUMBER OF U. S. PHYSICIANS

Under date of July 26, 1940, the above-named gentlemen addressed communications to the Indianapolis *Star* (and probably to various other newspapers) which we reproduce below together with a letter from Dr. Olin West, secretary of the American Medical Association, in regard to the whole matter. The movement might seem to be intended to lessen the stringency of present medical courses, a thing which none of our physicians would want.

The correspondence follows:

UNITED MEDICAL SERVICE

Operated by Dr. Joseph G. Berkowitz and Medical Associates
23 East Jackson Boulevard, Chicago, Illinois
July 26, 1940

Subject: Adequate supply of physicians and surgeons for both the Defensive Forces and the Civilian Population of the United States.

To: The Indianapolis Star.

The enclosed statement sets forth the pressing need for immediate action to provide physicians and surgeons both for the Defensive Forces about to be called into service, as well as the Civilian Population of these United States.

J. A. Ryan,
Brig.-Gen'l, U. S. Army, (Retired);
J. G. Berkowitz, M.D.

Present world conditions and those in Europe particularly have aroused our people to the necessity for an adequate preparedness program by our government and measures are being taken to increase the personnel of our army, navy, aviation and all other services necessary, as well as increasing its equipment and supplying it with all modern implements necessary to place us in a complete state of defense and preparedness.

All previous wars have shown that unless medical care is adequate, that deaths due to disease far exceed those due to the casualties of war.

Thus far, to our knowledge, nothing has been said as to the necessity of increasing the number of physicians and surgeons in the United States in order to supply the number of doctors necessary to care for both the preparedness program and the public.

At present the number of physicians in the United States is not based upon the great need of the public for curative and preventive medical care, but rather upon its ability to pay for the medical services rendered. We have today about 175,000 physicians to care for our more than 130,000,000 population, which means one physician for every 750 of our people.

The defense program as submitted by competent leaders indicates the need of one physician to every 175 to 200 enlisted personnel. This makes the proportion of doctors per 1,000 personnel needed for the different services almost four times the number at present available and used by our civilian population.

We speak of being adequately prepared for any emergency in possibly a period of a year or two, and of training aviators over a period of six months, but it takes many years to educate and train a doctor. After his pre-medical preparation of four years, he still has to go through four years of study at a medical college, and two years of hospital internship; in addition, he must study for several years in any specialty in which he may desire to become proficient.

While we have today in the United States about 175,000 doctors, in case of an emergency, there would be many rejections due to age, lack of knowledge, physical disability, marital status and for various other reasons. This would serve to reduce tremendously the number of doctors, possibly to less than 120,000 from which to select the medical personnel for a possible enlisted force of 6,000,000 this would require 30,000 physicians on active duty, not including the number necessary for replacement and in training, and it would be difficult even to withdraw a much smaller number without leaving the general public seriously unprotected.

Investigation will disclose that over a number of years there has been a progressive reduction in the number of medical teaching institutions. Also, those medical schools, private or state controlled, still in existence have been progressively reducing the number of new admissions every year to study for the medical profession. This is a definite policy of the American Medical Association and state medical societies. It has been done to control and restrict the number of physicians and surgeons that are to be available to the public in the years to come. It is not based upon lack of men possessing proper qualifications to study for the medical profession, for many more than are accepted are admitted to pre-medical courses and qualified in this free democratic country of equal opportunities to all, and are then told there is no room for them, even in the state tax supported medical schools. If this situation is allowed to continue, it will prove disasterous for the preparedness program and the general public. To meet this great need of preparedness to be adequately prepared the following plan should be adopted without delay:

1) All existing medical schools should be required to increase the number of admissions without delay up to the limit of their existing facilities and if necessary these facilities should be increased.
2) Vacation periods should be abolished; a medical student could then concentrate the required number of hours study and preparation over a period of three years instead of four.
3) Plans should be developed whereby part of their hospital training and internship

should be incorporated during this period of schooling.

4) Just as the government is paying for the training of men in all the branches of service such as aviation, army, navy, et cetera, it should appoint duly qualified men who have met the pre-medical requirements to study medicine and pay for their continued education and training. These medical students should be at once enrolled as members of a Medical Cadet Reserve Corps.

5) The government, in addition to the existing medical schools, should develop medical schools at all the base hospitals where their medical officer personnel and facilities are or could be made sufficiently adequate to teach general medicine and all its branches. (The Walter Reed Hospital would be particularly fitted for this purpose.)

6) The course of study should be arranged so that while all members of the Medical Students Reserve Corps receive the same basic education in medicine, each Medical Cadet at the same time should specialize and receive special instruction in one of the branches of medicine so that on the completion of their full course each could be assigned at once to that particular branch in which he has received specialized training. In case of extreme emergency the government could at once use these Medical Cadets to act as assistants to trained Medical Officers in their different specialties in field hospitals.

From present indications the next ten years will be filled with strife or preparations for strife and if we hope to protect the freedom of our people and our form of government on the western continent from the rule of dictators, an adequate supply of trained medical men is as necessary for the success of our efforts as are the other commissioned officers and personnel that lead and fight in the various services.

We realize that our goal of a navy on each ocean will take some years—it takes four years to build a battleship so our plans are laid accordingly. We must remember that under present conditions it takes at least ten years to make a doctor. We have not at present a sufficient force of medical men to adequately care for the population, if we are to make medical care, treatment and prevention available to all, let alone provide for the different services that are necessary for our defense program and this necessity can be met only by timely measures taken at once, as outlined above, for the training of more men and women for the medical profession to meet this emergency and continued need for medical care by the public.

This plan may arouse the opposition of the American Medical Association and the branch state medical societies in view of their present policies, but in spite of this, there will be many qualified physicians who would place the country's need before their Association policies and provide the co-operation to meet this need.

Signed: J. A. RYAN,
Brig.-Gen., U. S. Army (Retired);
J. G. BERKOWITZ, M.D.
Chicago, Illinois,
July 26, 1940.

Copies to:
President and Cabinet
Members of the House and Senate
Members Advisory Commission to Council on National Defense

AMERICAN MEDICAL ASSOCIATION
535 North Dearborn Street, CHICAGO

August 21, 1940.

Dear Mr. Hendricks:

I have your letter of August 12 to which is attached a statement sent to the Indianapolis Star by J. A. Ryan and J. G. Berkowitz. I first saw this statement in the Congressional Record where it appeared as "Extension of Remarks of Hon. Lee E. Geyer of California," member of the House of Representatives. The same statement apparently was sent to the President of the United States, to members of the United States Senate and of the House of Representatives, and to members of the Advisory Commission to the National Defense Council. I infer from the fact that the statement went to the Indianapolis Star that it has also been sent to various newspapers.

Dr. Joseph G. Berkowitz was formerly medical director of the Chicago Public Health Institute, and I am informed that the institute probably came into being as a result of his efforts. When his services with that organization were terminated, he organized the United Medical Service, a business concern, which, according to my understanding, engaged in the practice of medicine through the services of employed physicians subject, as I am informed, to direction by Doctor Berkowitz. I am further informed that proceedings were brought in the courts of Illinois by representatives of certain medical societies in the State of Illinois, not including the American Medical Association, designed to establish the facts as to the legality of the activities of the United Medical Service in the field of medical practice. It is my understanding that the decision rendered by the court in which these proceedings were instituted and by the Supreme Court of the State of Illinois declared the United Medical Service to be engaged in the corporate practice of medicine in violation of the laws of the state.

I am informed that James A. Ryan is a retired officer of the United States Army, having been retired with the rank of Brigadier-General. In so far as I have been able to ascertain, General Ryan is not an expert in the field of medical education or in the field of medical service. I think it is possible that he is employed as business manager of the

United Medical Service, although I understand that Doctor Berkowitz is remarkably proficient in affairs of a strictly business nature. Some of the statements in the communication, which apparently was sent by General Ryan and Doctor Berkowitz to the President, members of Congress and others, are, in my opinion, very misleading. It is common knowledge that there is no nation on earth in which the number of physicians as compared with the total population is as large as in the United States. Moreover, it is very generally known that official statistics pertaining to mortality and morbidity in the United States have shown constant and remarkable decreases year after year.

In the statement submitted by General Ryan and Doctor Berkowitz it is specifically stated that "investigation will disclose that over a number of years there has been a progressive reduction in the number of medical teaching institutions." While this statement is true in a certain sense, it is not true in the sense of the purpose which, I feel quite certain, it may have been intended to serve. In 1905 there were 160 medical schools in the United States, including a rather large number that had no endowments whatever and depended entirely on income received from student fees for financial support. A considerable number of these schools were owned by the members of their faculties and in some instances, as I recall the facts, were owned by a very small group of physicians who controlled the policies of the institutions. Included in the 160 medical schools in existence in 1905 were several which were later shown to be little better than pure diploma mills. Some of these went out of existence as the result of legal action taken by state officials whereby the charters of the institutions were revoked. In 1910 there were 131 medical schools in the United States and this number had been reduced to 96 by 1915, to 85 by 1920, to 80 by 1925, and to 76 by 1930. In 1935 there were 77 medical schools in the United States and that number has remained unchanged from 1935 through 1939.

It is stated in the Ryan-Berkowitz statement that the "medical schools, private or state controlled, still in existence have been progressively reducing the number of new admissions every year to study for the medical profession." It is quite true that as the standards of medical education have been improved and as scientific medical knowledge has developed, it has become necessary for the best medical schools to reduce the number of admissions to first year classes, but this has been done for just one purpose, namely, to insure that the teaching personnel of the institutions should have opportunity to do the best possible work, and that the members of first year classes should receive the best possible instruction and training. The statement offered by General Ryan and Doctor Berkowitz to the effect that the reduction of the number of admissions to first class medical schools is a definite policy of the American Medical Association and its constituent state medical associations adopted for the specific purpose of controlling and restricting the number of physicians and surgeons that are to be available to the public in years to come is nothing more nor less than an absolute untruth.

In 1900 the 160 medical schools in the United States, including good, bad and indifferent, graduated 5,214 young men and women. In 1905 the same number of medical schools graduated 5,606. In 1910, 131 medical schools graduated 4,440. In 1920, 85 medical schools graduated 3,047, the number of graduates having been seriously reduced because of upheavals in preceding years due to the World War. In 1930, 76 medical schools graduated 4,565, and in 1935, 77 medical schools graduated 5,101. The same number of schools in 1937 graduated 5,377, in 1938, 5,194 and in 1939, 5,089. In the interim between 1905 and 1939 thousands of miles of good roads were built throughout the United States, hundreds of hospitals were founded, the telephone system of the nation was established in marvelous fashion and the use of the automobile became almost universal among physicians. The improvement in facilities for communication and transportation effected marked changes in many of the methods of medical practice and made it easily possible for a physician to see many more patients and to render even better service than had been at all possible in the earlier part of the current century.

I do not know where General Ryan and Doctor Berkowitz secured their figures concerning the number of physicians stated by them to be needed for military and other services, as these services may develop through the adoption of a national preparedness program. However, it is my distinct recollection that figures, which I have heard stated by officials of governmental agencies, are not in accord with those of General Ryan and Doctor Berkowitz. In the Ryan-Berkowitz statement, it is stated that after a young man has finished his "pre-medical preparation of four years he still has to go through four years of study at a medical college and two years of hospital internship." Four years pre-medical preparation is not required by all medical schools of applicants for admission to first year classes. In 27 of the 48 states, as I am informed, it is not required that an applicant for medical license shall have served an internship. There is exactly one medical school in the United States which requires two years of internship as a requisite to graduation. There is no state in the United States which requires that an applicant for license to practice medicine shall have served an internship of two years.

It is nothing more nor less than pure folly for anyone to advise that all existing medical schools should be required to increase the number of admissions without delay. The good medical schools accept for admission in the first year classes the number of students who can receive through available facilities the best teaching and training the

schools can give, and I dare say that those who have devoted their lives to the cause of medical education are in better position than either General Ryan or Doctor Berkowitz to determine just how these schools can render the greatest service to medicine and, thereby, to the public in the teaching and training of those who desire to prepare themselves for the practice of medicine.

There are other comments, of a nature more or less similar to those offered in this letter, which might reasonably be made with respect to the Ryan-Berkowitz statement, but it does not seem worth while to use the time that would be required to offer these statements or to use your time in considering them.

No one, of course, can say what will develop within the next few years, but it can be said very definitely and with complete assurance that medical education in the United States has not been static, and that the progressive changes made in the methods of all good medical schools in this country have been made for the promotion of the art and science of medicine and the betterment of the public health and with the sincere desire and purpose of making available to the people of the nation the best medical service that can be provided. It can be said with equal assurance that these schools and other agencies that are giving devoted service to the cause of medical education in the United States will not fail in their efforts to maintain the highest possible standards of education, to contribute all that they can to the improvement and extension of good medical service for the public benefit and to do their full part in any sound program of medical preparedness. It would be disastrous to the cause of scientific medicine and to the public interest if the standards of medical education, under which the best trained physicians that have ever been produced in the history of the world are being sent out into the various fields of medicine, should be lowered or if the number of inferior schools of medicine should be increased.

The material that was attached to your letter is being returned to you.

(Signed) Olin West, M.D.

RULES FOR MAKING THE PRE-MARITAL SYPHILIS TESTS

To The Editor:

A recent act of the State Legislature makes it mandatory that certain pre-marital and pre-natal tests for syphilis be made. The Legislature gave to the State Board of Health in conjunction with the Department of Pathology of the University the responsibility of setting the standards and formulating the rules under which the provisions of the act are to be carried out.

In accordance with this provision, and in addition to its own laboratory, the State Board of Health has accredited for serological tests for syphilis certain other laboratories in the state which fulfill its requirements. Among these requirements is the eminently proper one that any person wishing to qualify for this work must pass a rigid practical test on unknown sera sent out by the board. In addition, however, to the foregoing very fair requirements is one which I believe, if it were generally known, would meet the overwhelming condemnation of the majority of licensed physicians in the state. This requirement is that the work of any one doing these tests, even though he has passed the board's rigid practical test and examination, must be "supervised" by a licensed physician who has had at least three years graduate work in this line and who is devoting the majority of his time to the specialty of laboratory diagnosis.

Now, if these accepted serological tests were very difficult to make, or required the judgment of very experienced persons to read, the foregoing "exclusion act" might have some justification. But on the contrary, these tests require only the careful work of an intelligent person trained in chemical and laboratory methods and differ not at all in this regard from many other laboratory procedures. It is well known that the specialist's supervision mentioned above generally consists only of signing the report. As a matter of fact, this ruling makes it possible for an extremely limited number of laboratory physicians to control all of this work in the state. Indeed, that is the situation at this time and, no doubt, that was the intention of the board or its advisors in making this ruling. Probably it would increase the work of the board to examine, supervise and accredit more persons who might wish to do this work, but in justice to the other licensed physicians of the state, I believe it should be done. And further, I believe that any licensed physician in this state should be entitled to have his serological work recognized and accredited by the board, whether done by himself or by a competent technician working under him, with the one restriction and sufficient restriction that previous to his work being accredited it shall have been examined and found accurate to the satisfaction of the State Board of Health.

The present regulation makes it impossible for many competent diagnosticians, clinics and hospitals as well as younger competent licensed physicians to have their serological work accredited legally unless they hire a "supervisor" from among the very limited number of accredited laboratory directors.

If a sufficient number of hospitals, clinics or other interested physicians are sufficiently interested to complain vigorously to the board regarding this matter, the State Board of Health might be induced to take appropriate action.

DON F. CAMERON, M.D.,
Fort Wayne, Indiana.

Deaths

Joseph Emerson Welborn, M.D., of Evansville, surgeon for the Welborn-Walker hospital, died of a heart attack, August nineteenth. Dr. Welborn was thirty-five years old. He graduated from the Indiana University School of Medicine in 1929. He was a member of the Vanderburgh County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association.

Bleeker James Knapp, M.D., of Evansville, died August twentieth, age sixty-two years. Dr. Knapp specialized in ophthalmology and otolaryngology and had practiced with his father, Dr. A. J. Knapp, for many years. Dr. Knapp was a member of the Vanderburgh County Medical Society, the Indiana State Medical Association, the American Academy of Ophthalmology and Otolaryngology, and was a Fellow of the American Medical Association and of the American College of Surgeons. He graduated from Rush Medical College, Chicago, in 1901.

Herman O. Seipel, M.D., of Valparaiso, died at his summer home at Edgewater, Flint Lake, July nineteenth. Dr. Seipel was fifty-four years of age. He was a graduate of the Chicago College of Medicine and Surgery in 1914 and since 1917 had practiced in Valparaiso. He served with the medical corps during the World War. He had served as coroner of Porter county for twelve years, and also had served as city and county health officer. He was a member of the Porter County Medical Society, the Indiana State Medical Association, and the American Medical Association.

William R. Johnston, M.D., age seventy-three years, died at his home in Charlottesville, August eighth. He graduated from the Medical College of Ohio, Cincinnati, in 1897, and was a member of the Hancock County Medical Society, the Indiana State Medical Association, and the American Medical Association. He had practiced in Charlottesville for more than forty years.

John A. Toliver, M.D., of French Lick, died August eighth, aged eighty-seven years. Dr. Toliver was a pioneer school teacher and had practiced medicine for nearly forty years. He graduated from the University of Louisville, School of Medicine, in 1893. He had owned and operated the Toliver and Grand hotels in French Lick for many years.

George Harding, M.D., eighty-one-year-old retired Warsaw physician, died July thirtieth. He had been ill for several months. He had resided in Warsaw for the past twenty-eight years. He graduated from the University of Michigan Medical School in Ann Arbor in 1897.

Frank H. Green, M.D., physician and surgeon at Rushville for forty-three years, died July thirty-first, aged sixty-four years. Dr. Green founded the hospital that carries his name. He served as a captain in the medical corps during the World War, and had been a member of numerous local civic organizations. He was a graduate of the Medical College of Indiana, Indianapolis, in 1897, and was a member of the Rush County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association.

Charles B. Yott, M.D., otolaryngologist of Indianapolis, was found dead in his home in Indianapolis, August third. Dr. Yott was thirty-five years old. He was on the staffs of St. Vincent's and Methodist hospitals in Indianapolis, and was a member of the Kiwanis club, Nu Sigma Nu medical fraternity, and had been a member of the Indianapolis Medical Society and the Indiana State Medical Association.

James Meade Atkinson, M.D., of Eaton, died August twelfth, aged seventy-seven years. Dr. Atkinson graduated from the University of Michigan Medical School at Ann Arbor in 1893 and was a member of the Delaware-Blackford County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association.

Edgar Allen Peck, M.D., retired physician of Valparaiso, died August tenth, aged eighty-three years. Dr. Peck graduated from the University of Michigan Medical School, Ann Arbor, in 1880, and had practiced in Battle Creek, Michigan, and Kankakee, Illinois.

Albert Earl Freeman, M.D., of Greentown, died August eleventh, age fifty-nine years. Dr. Freeman was a graduate of the Hering Medical College, Chicago, in 1903.

News Notes

Miss Mary Cox, of Odon, and Dr. A. L. Marshall, of Indianapolis, were married in Indianapolis, July twenty-seventh.

* * *

Miss Hope Toman of Indianapolis and Dr. Joseph S. Skobba of Indianapolis were married August first in Fort Wayne. Dr. and Mrs. Skobba will reside in Butlerville where Dr. Skobba will serve as superintendent of the Muscatatuck Colony.

* * *

Miss Alene Bowman, daughter of Dr. and Mrs. Ira E. Bowman, of Odon, and Dr. Frank G. Rudolph, of Hammond, were married in Odon, August third.

* * *

Mrs. Helen Bennett, of Logansport, and Dr. H. B. Gable, of Monticello, were married in Logansport, August seventh.

* * *

Dr. R. E. Zwickel, former practicing physician of Stearns, Kentucky, has located in Newburgh where he has purchased the office equipment of the late Dr. Munns.

* * *

Dr. William E. Barnett of Logansport took postgraduate work at Harvard University medical school during the month of August.

* * *

Dr. Neal Baxter, secretary of the Monroe County Medical Society, was speaker July thirty-first at the Rotary club meeting in Bloomington.

* * *

Secretaries of the doctors of the Lake County Medical Society had a picnic in July at the home of Dr. and Mrs. Robert Doty. More than eighty were in attendance.

* * *

Dr. J. T. Oliphant of Farmersburg addressed members of the Sullivan Rotary club, July twenty-ninth.

* * *

Dr. J. L. Blaize of Vincennes has taken the office and practice of Drs. Richard and Maurice Fox in Freelandville.

* * *

Dr. D. J. Steele of Greencastle has moved into his new office in the Alamo Building.

* * *

A bronze tablet erected to the memory of pioneer physicians of Clay county was dedicated July twenty-eighth. Dr. John G. Benson of Indianapolis was the principal speaker at the ceremonies. The tablet has been placed in the Clay County hospital by the Clay County Medical Society.

The American College of Physicians will meet in Boston, with general headquarters at the Statler Hotel, April 21-25, 1941.

* * *

Dr. W. L. Pugh was guest speaker at the Evansville Exchange Club meeting, July 22. His subject was "Orthopedic Surgery."

* * *

Dr. Abraham Tauber, of Detroit, has been appointed to the medical staff of Logansport State Hospital.

* * *

Dr. Frank Oliphant has moved to his new building at Seventh and Mulberry streets in Mt. Vernon. The building houses the doctor's office on the first floor and his residence on the second floor.

* * *

Dr. W. H. Braunlin, of Marion, and his brother, Dr. Edgar Braunlin, of Dayton, Ohio, sustained injuries July twenty-second, when their fishing boat was struck by a heavy motor boat on Lake Wawasee.

* * *

Three hundred former and present employees of Logansport State Hospital attended the third annual reunion of the group in Logansport, July twenty-first.

* * *

Dr. James M. Billman of Sullivan is retiring after forty-four years of practice.

* * *

Dr. Mary Westfall, Indianapolis, dentist on the staff of the State Board of Health's Bureau of Maternal and Child Welfare, died August fifth after a long illness.

* * *

Members of the Grant County Medical Society held a meeting at Marion, June twenty-seventh, with Dr. Ernest Jones of Richmond as principal speaker. Dr. Jones presented a review of the work being done at the Eastern Hospital for the Insane. Attendance numbered thirty-one. A chicken dinner was served at the Ross Pence farm.

* * *

According to the specialties division of the U. S. Department of Commerce, the strong foreign demand for American scientific and laboratory instruments and apparatus is reflected in current export sales. During the first six months of the present year, foreign sales increased 68.8 percent over the corresponding period of 1939 and 47.9 percent over the same period in 1938. Canada continues to be the largest export outlet for United States scientific and laboratory instruments and apparatus, purchasing 18.5 percent of the total exports for the first six months of 1940.

The sixth annual meeting of the Mississippi Valley Medical Society will be held at the Hotel Fort Armstrong, Rock Island, Ill., September 25-26-27. A special feature of the program this year will be numerous short instructional courses, there being 41 of these scheduled. Every ethical physician is invited to attend. The complete program may be secured from the secretary, Harold Swanberg, M.D., W.C.U. Building, Quincy, Illinois.

* * *

The American Board of Ophthalmology announces that there will be only one written examination during 1941. This will be held in various cities throughout the country on March 8th. Candidates enrolled in the Preparatory Group who have been advised that they will be eligible for examination during 1941 should make application at once to take this written examination. Application must be made on the regular blanks provided for the purpose and must be received in the Board Office before December 1, 1940. If you plan on taking your examination during 1941, please write at once to the Board Office for formal application blanks, indicating your preference of examination place. Address American Board of Ophthalmology, 6830 Waterman Avenue, St. Louis, Missouri.

* * *

The third annual essay contest of the Mississippi Valley Medical Society "for the best unpublished essay on a subject of practical and applicable value to the general practitioner of medicine" has been concluded. The annual awards committee of the society has announced that John F. Casey, M.D., of Boston, Mass., visiting physician, St. Elizabeth's Hospital, Boston, is the winner; F. Stanley Morest, M.D., of Kansas City, Mo., second, and Charles W. Pavey, M.D., of Columbus, Ohio, third. The winner receives a $100 cash prize, a gold medal, a certificate award, and an invitation to present his essay before the annual meeting of the Mississippi Valley Medical Society. Dr. Casey's subject was "A Study of the Use of Sulfapyridine and Sulfathiazole in Pneumonia, with Particular Reference to the Treatment of Pneumonia by the General Practitioner."

* * *

U. S. CIVIL SERVICE EXAMINATIONS

The United States Civil Service Commission announces open competitive examinations for the positions of (1) Pathologist (medical), $3,800 per year: (2) Veterinarian (research), $3,800 per year; (3) Senior Medical Officer, $4,600 per year; (4) Medical Officer, $3,800 per year; (5) Associate Medical Officer, $3,200 per year, and (6) Junior Graduate Nurse, $1,620 per year.

For the first two, applications must be on file with the U. S. Civil Service Commission at Washington, D.C., not later than September ninth. For the third, fourth, and fifth, applications will be filed and rated as received until further notice. For the sixth, applications will be accepted continuously until further notice, and because of the demand for eligibles the minimum height has been reduced to sixty inches.

Application forms may be obtained from the secretary, Board of United States Civil Service Examiners, at any first or second-class post office, or from the United States Civil Service Commission at Washington, D.C.

* * *

The United States Civil Service Commission has announced open competitive examinations to fill medical officer positions in the United States Public Health Service and Food and Drug Administration, Federal Security Agency; Veterans Administration; Civil Aeronautics Authority, Department of Commerce; and Indian Service, Department of the Interior.

The examinations cover three grades with salaries ranging from $3,200 to $4,600, subject to a deduction of 3½ percent toward a retirement annuity. Applications must be filed with the United States Civil Service Commission, Washington, D. C., and will be rated as received until further notice.

Applicants must have been graduated with an M.D. degree from a recognized medical school, and must have had professional experience in one of the following optional branches: Aviation medicine; cancer research; cardiology; dermatology; eye, ear, nose, and throat (singly or combined); general practice; industrial medicine; internal medicine and diagnosis; medical pharmacology; neuropsychiatry; pathology, bacteriology, and roentgenology (singly or combined); public health; surgery; tuberculosis; and urology. For some positions in the Veterans Administration applicants for associate medical officer, paying $3,200 a year, need not have had experience other than one year of internship. Applicants for the associate grade must not have passed their fortieth birthday, and for the other two grades they must not have passed their fifty-third birthday.

Further information regarding the examinations, and the detailed requirements, are given in the formal announcement. Announcements and application forms may be obtained from the Secretary of the Board of U. S. Civil Service Examiners at any first- or second-class post office, or from the U. S. Civil Service Commission, Washington, D. C.

INTER-STATE POSTGRADUATE MEDICAL ASSOCIATION MEETING

This year's International Assembly of the Inter-State Postgraduate Medical Association of North America will be held in the Public Auditorium, Cleveland, Ohio, October 14, 15, 16, 17 and 18.

The Academy of Medicine of Cleveland and the Cuyahoga County Medical Society will be host to the Assembly and have arranged an excellent list

of committees who will function throughout the Assembly.

The officers of the Inter-State Postgraduate Medical Association, those of the Academy of Medicine of Cleveland and the Cuyahoga County Medical Society, and the Ohio State Medical Association, extend a very cordial invitation to all members of the profession in good standing to attend the Assembly.

The members of the profession are urged to bring their ladies with them as a very excellent program is being arranged for their benefit by the Ladies' Committee.

A full program of scientific and clinical sessions will take place each day and evening of the Assembly, starting at 8:00 o'clock, in the morning.

In cooperation with the Academy of Medicine and the Cuyahoga County Medical Society, the Ohio State Medical Association and the Cleveland Convention and Visitors' Bureau and Cleveland Chamber of Commerce, a most excellent opportunity for an intensive week of postgraduate medical instruction is offered by in the neighborhood of eighty distinguished teachers and clinicians from different parts of the United States and Canada who are honoring the Assembly by contributing to the program. The speakers and subjects have been carefully selected by the program committee.

Pre-assembly and post-assembly clinics will be conducted, free of charge, in the Cleveland Hospitals on the Saturdays previous and following the Assembly for visiting members of the profession.

Excellent scientific and commercial exhibits of great interest to the medical profession will be an important part of the Assembly. These exhibits will be open to members of the medical profession in good standing without paying the registration fee.

The registration fee for the scientific and clinical sessions will be $5.00.

The list of distinguished teachers and clinicians who are to take part on the program appears on page xxv of the advertising section of this Journal.

Complete program may be obtained by writing to Dr. William B. Peck, Managing Director, Freeport, Illinois.

SHORT COURSES IN TUBERCULOSIS OFFERED

The Indiana Tuberculosis Association again offers short courses in tuberculosis to the physicians of Indiana. In order to make it possible for the physicians to attend these courses without much loss of time, several sanatoria of the state will be used as teaching centers. Any one wishing to attend the course may select any place preferred. Only one afternoon and evening will be devoted to the work.

The purpose of the course is to acquaint the physicians with recent progress in the treatment of tuberculosis.

The institute will follow the round table method, each topic being presented briefly by the instructor, allowing most of the period to be devoted to questions and answers. In addition, part of the time will be devoted to clinics and demonstrations. Splendid clinical material for the work will be available. The program is as follows:

1:00 to 5:00 p. m.
1. Pattern of Tuberculosis
 A. Law of Marfan (Antagonism between Pulmonary and Extra Pulmonary Tuberculosis)
2. Diagnosis and Treatment
 A. Round Table Discussion
3. General Management of Tuberculosis. Designed to assist the doctor in management of the patient in the home; also after the patient is discharged from the sanatorium.
4. Problems as seen in the Sanatorium
5. New Procedures
6. X-ray Interpretation
7. Surgical Procedures
 A. Collapse Therapy
 B. Pleural Effusion
 1. Serous
 2. Pyogenic
8. Clinics

6:00 p. m. Dinner—Followed by Evening Session

The short course will be held at the following institutions on the dates indicated:

Indiana State Sanatorium, Rockville, September 24
Boehne Tuberculosis Hospital, Evansville, October 8
James O. Parramore Hospital, Crown Point, October 10
Smith-Esteb Memorial Hospital, Richmond, October 10
Irene Byron Sanatorium, Ft. Wayne, October 15
Sunnyside Sanatorium, Indianapolis, October 16
Healthwin Sanatorium, South Bend, October 22
Hillcrest Tuberculosis Hospital, Vincennes, October 22
Silvercrest Tuberculosis Hospital, New Albany, October 23
William Ross Sanatorium, Lafayette, November 12

There will be no fee attached to the course which is being presented as an aid to the medical profession.

Further information will be supplied by the Indiana Tuberculosis Association, 1219 Security Trust Building, Indianapolis.

ELEVENTH INDIANA COUNCILOR DISTRICT

The Eleventh Indiana Councilor District Medical Association will hold a meeting on the campus of Manchester College, at North Manchester, Wednesday, October second, 1940.

The program will be as follows:

10:00 a.m.—Clinics.

12:30 p.m.—Luncheon in college dining hall.

2:00 p.m.—Business and scientific program

I. "Medical Preparedness and Service," by Charles R. Bird, M.D., Indianapolis.
Questions and general discussion.

II. "Experiences in Conducting a Baby Clinic in Private Practice." By Elton R. Clarke, M.D., Kokomo.

III. "Burns and Their Treatment." By Harold M. Trusler, M.D., Indianapolis.

6:00 p.m.—Dinner at the College and evening program under the auspices of the Wabash County Medical Society. Speaker to be announced later.

REGIONAL POSTGRADUATE COURSES IN OBSTETRICS TO BE RESUMED THIS FALL

Through the joint cooperation of the Indiana State Medical Association, Indiana University School of Medicine, and the Bureau of Maternal and Child-Health of the Indiana State Board of Health, the regional postgraduate courses in obstetrics will be resumed this fall. These courses are planned on a four to six weeks series of meetings, the courses being held each consecutive week during this period.

Following are the programs for the Postgraduate Courses in Obstetrics sponsored by the Howard County Medical Society to be held at Kokomo, Indiana, during five consecutive weeks beginning on Friday, September 6, and the course to be sponsored by the Montgomery County Medical Society. The latter course will be held at the Crawford Hotel, Crawfordsville, Indiana, for four consecutive Thursdays beginning on Thursday, September 12.

Similar programs can be arranged either on a county or district basis for any societies wishing to conduct such a course. Program chairmen interested in this type of postgraduate education should write to Doctor Carl P. Huber, Indiana Medical Center, or to the headquarters offices of the Indiana State Medical Association.

PROGRAM FOR POSTGRADUATE COURSE IN OBSTETRICS SPONSORED BY HOWARD COUNTY MEDICAL SOCIETY

Note: These meetings will be held at the Frances Hotel at Kokomo, Indiana. All meetings will start with dinner to be served at 6:00 P.M.

First Meeting—**Friday, September 6**

1. Antenatal Care and Management of Labor
2. Episiotomy and Repair
 (With motion pictures)

Second Meeting—**Friday, September 13**

1. Abortion and Ectopic Pregnancy
2. Postpartum Hemorrhage
 (With motion pictures)
3. Placenta Previa and Abruptio Placenta

Third Meeting—**Friday, September 20**

1. Indications for the Use of Forceps
2. Forceps
 (With motion pictures)
3. Posterior Positions

Fourth Meeting—**Friday, September 27**

1. Toxemias of Pregnancy
2. Eclampsia
 (With motion pictures)
3. Hyperemesis Gravidarum

Fifth Meeting—**Friday, October 4**

1. Cesarean Section
2. Low Cervical Cesarean Section
 (With motion pictures)
3. Puerperal Infection

PROGRAM FOR POSTGRADUATE COURSE IN OBSTETRICS SPONSORED BY MONTGOMERY COUNTY MEDICAL SOCIETY

Note: All sessions in this postgraduate series will be held at the Crawford Hotel, Crawfordsville, Indiana. The afternoon sessions will start at 4:00 P.M., followed by dinner at 6:00 P.M. The evening meetings will be held from 7:00 to 9:00 P.M.

First Meeting—**Thursday, September 12**

4:00-6:00 P.M.
1. Antenatal Care
2. The Mechanism of Delivery
 (With motion pictures)

7:00-9:00 P.M.
1. The Management of Labor
2. Episiotomy and Repair
 (With motion pictures)

Second Meeting—**Thursday, September 19**

4:00-6:00 P.M.
1. Abortion and Ectopic Pregnancy
2. Postpartum Hemorrhage
 (With motion pictures)

7:00-9:00 P.M.
1. Placenta Previa and Abruptio Placenta
2. Medical Complications of Pregnancy

Third Meeting—**Thursday, September 26**

4:00-6:00 P.M.
1. Posterior Positions
2. Breech Delivery
 (With motion pictures)
1. Indications for the Use of Forceps
2. Forceps
 (With motion pictures)

Fourth Meeting—**Thursday, October 3**

4:00-6:00 P.M.
1. Puerperal Infection
2. Cesarean Section
 (With motion pictures)

7:00-9:00 P.M.
1. The Toxemias of Pregnancy
2. Eclampsia
 (With motion pictures)

INTRAMURAL POSTGRADUATE COURSES IN OBSTETRICS TO BE RESUMED AT UNIVERSITY THIS FALL

The two-weeks intensified postgraduate courses in obstetrics sponsored through the joint cooperation of Indiana University School of Medicine, Indiana State Medical Association, and the Indiana State Board of Health, will be resumed at the Indiana University Medical Center this fall. It is planned to hold four courses during the coming school year, each designed to accommodate four to six postgraduate students who will reside at the University Medical Center. Details of the contents of the courses will appear in the October issue of THE JOURNAL.

Courses will be held on the following dates: 1st Course, November 4-16, 1940; 2nd Course, January 13-25, 1941; 3rd Course, April 14-26, 1941; 4th Course, July 7-19, 1941.

REGIONAL POSTGRADUATE COURSE IN PEDIATRICS SPONSORED BY ELKHART COUNTY MEDICAL SOCIETY

Following is the program for the Regional Postgraduate Course in Pediatrics, to start on Thursday, September 5, and continue through Thursday.

October 3, sponsored by the Elkhart County Medical Society.

The Program Committee of the local society has endeavored to cover important subjects in the field of Pediatrics, which should be of interest to each practitioner of the county and district.

These courses are made possible without cost to the society through the additional cooperation of the Bureau of Maternal and Child-Health of the Indiana State Board of Health in extending the program of postgraduate education in Indiana.

PROGRAM

First Meeting—Elkhart—Thursday, September 5
Elkhart Hotel—6:30 P.M.

Contagious Diseases—Control and Curative Treatament.
Archibald L. Hoyne, M.D., Isolation Hospital, Chicago.

Second Meeting—Elkhart—Wednesday, September 18
Elkhart Hotel—7:30 P.M.

Gastro-Intestinal Disorders—Infant Feeding—Diarrhea.
Milo K. Miller, M.D., South Bend.

Surgical Disorders of the Abdomen in Children
George F. Green, M.D., South Bend.

Third Meeting—Elkhart—Wednesday, September 25
Elkhart Hotel—7:30 P.M.

The Care of the Premature and Newborn Infant
Medical and Public Health Aspects—Howard B. Mettel, M.D., Chief of Bureau of Maternal and Child-Health, Indiana State Board of Health.
Nursing Aspects—Miss Mary Ellen Warstler, R.N., Consultant in Premature Nursing of Bureau.

Fourth Meeting—Elkhart—Thursday, October 3
Elkhart Hotel—6:30 P.M.

Respiratory Tract Infections in Children
E. R. Carlo, M.D., Fort Wayne.

INDIANA UNIVERSITY NEWS

Miss Grace Blankenship has been appointed to succeed Mark Helm, retired, as registrar of the Indiana University School of Medicine in Indianapolis. Miss Blankenship was assistant to Mr. Helm for three years prior to his retirement July 1. She was for thirteen years secretary to the late Merle N. A. Walker, when he was judge of the Marion County Probate Court and a prominent Indianapolis attorney.

A total of 2,851 visitors, 509 more than the previcus year, passed through James Whitcomb Riley Hospital for Children during the fiscal year ending July 1, it was announced this week.

Most Indiana counties, ten states other than Indiana, including California, and one foreign country were represented among the visitors. Hugh McK Landon, chairman of the joint executive committee of the hospital, said the increasing number of visitors "is a compliment to the work the hospital staff is doing and also is gratifying to members of the James Whitcomb Riley Memorial Association, which has endeavored to perpetuate the memory of the Hoosier poet."

That interest in the hospital is closely linked with interest in the life and work of the poet after whom it was named is indicated by the fact that 321 of the visitors were received during October, the birth anniversary of Mr. Riley. Only two other months, May with 558 visitors, and April with 491, exceeded October.

The joint executive committee, composed of representatives of the memorial association and of the board of trustees of Indiana University, established Mrs. Nellie Cravens as full-time hostess two years ago. The growing number of visitors made it necessary to place a full-time person in charge of tours, it was pointed out.

Visitations are restricted to persons more than 16 years old. Included among last year's visitors were a number of professional people studying hospital administration and medical and surgical practices, Mrs. Cravens reported. Among those was Father Flanagan, founder of Boystown, Nebraska.

SOCIETIES AND INSTITUTIONS

WOMAN'S AUXILIARY

President—Mrs. W. E. Tinney, Indianapolis.
President-elect—Mrs. C. R. Bock, Muncie.
Corresponding Secretary—Mrs. Byron Rust, Indianapolis.
Treasurer—Mrs. C. V. Rozelle, Anderson.

The Executive Board of the Woman's Auxiliary to the Indiana State Medical Association held a luncheon and board meeting on Thursday, July 18th, 1940, at the Columbia Club in Indianapolis. Those present included: from Terre Haute, Mrs. E. O. Nay, Mrs. M. B. VanCleve, Mrs. Floyd Riggs; from Fort Wayne, Mrs. Arnold Duemling, Mrs. E. M. VanBuskirk, Mrs. E. N. Mendenhall; from Muncie, Mrs. U. G. Poland, Mrs. A. L. Bock, Mrs. T. R. Hayes; from Kokomo, Mrs. F. S. Cuthbert; Mrs. G. N. Druley; from Anderson, Mrs. C. V. Rozelle, Mrs. J. W. King; from Logansport, Mrs. Charles Viney, Mrs. W. W. Holmes; from New Albany, Mrs. J. Baxter, Jr.; from French Lick, Mrs. George Dillinger; from Indianapolis, Mrs. W. E. Tinney, Mrs. C. F. Voyles, Mrs. O. G. Pfaff, Mrs. Byron K. Rust, Mrs. C. C. Taylor, Mrs. R. D. Howell, and Mrs. Emmett Lamb.

Following the luncheon, Mr. Thomas Hendricks, executive secretary of the Indiana State Medical Society, addressed the group on the subject "Medical Military Preparedness." He outlined the M-day plan which was presented in the House of Delegates of the American Medical Association by the Indiana delegation, and suggested that the Woman's Auxiliary cooperate in this plan. Mrs.

Tinney stated that in the talks by both Dr. Fishbein and Dr. Van Etten at the New York meeting of the American Medical Association, stress was laid on the cooperation of the Woman's Auxiliary with the medical defense plan. She suggested that we, as an organization, should go on record as preparing a resolution that we will cooperate with this defense plan. The motion was made and carried that such a resolution be prepared and brought up at the state meeting as a recommendation of the Executive Board.

Following Mr. Hendrick's talk, Mrs. Tinney introduced the incoming state president, Mrs. A. L. Bock, of Muncie, Indiana, who gave a brief talk. Greetings were also extended to the new Auxiliary organizations of Logansport and Kokomo.

Arrangements were then discussed for the Woman's Auxiliary breakfast, which is held every year at the convention of the Indiana Medical Association. It was urged that each auxiliary present an exhibit, which will be on display at French Lick during the entire convention. These exhibits are a visual education of the work done in the different counties, which is more easily comprehended in this way than in any other. Mrs. Tinney reported that at the meeting in New York in June, the Indiana exhibit was given special attention because of the number of counties organized. All exhibits, however, were of unusual interest and plainly showed the interest of the auxiliaries.

It is expected that the attendance at the State Breakfast will be much greater this year, due in part to the fifteen new auxiliaries in the state and also to the fact that the executive board is planning to "stream-line" the breakfast, presenting an interesting, thought-provoking program in a meeting that will convene and adjourn promptly. This larger attendance is especially desired at this time because it is not possible to understand the opportunities of the Auxiliary unless our members have a full knowledge of the work of the Auxiliary, and this can best be gained by attendance at all of the meetings.

Read Mrs. Dillinger's announcement on page 483.

MRS. C. C. TAYLOR
Press and Publicity Committee.

MANUAL OF MILITARY MEDICINE

(Continued from Page 483)

from the Original of Baron Von Swieten," "The Nature and Treatment of Gun-Shot Wounds," by John Ranby, Esq., Surgeon General of the British Army, and "Prevention of the Scurvy at Sea" by William Northcote, Surgeon. These three works comprised only one hundred sixty-five pages, so that even combined with Jones' treatise they made far from an imposing volume, yet they constituted the principal guide of the army surgeon in the Revolutionary War.

Jones' simple little book was his only publication. It serves, however, to perpetuate the name of one of the first of America's great surgeons.

INDIANA STATE MEDICAL ASSOCIATION
THE EXECUTIVE COMMITTEE

July 28, 1940

Roll call showed the following present: C. A. Nafe, M.D., chairman; C. H. McCaskey, M.D., K. R. Ruddell, M.D., A. M. Mitchell, M.D., M. A. Austin, M.D., A. F. Weyerbacher, M.D.; Albert Stump, attorney, and T. A. Hendricks, executive secretary.

Luncheon guests: C. V. Rozelle, M.D., chairman, and Lowell M. Greene, M.D., member, Committee on Industrial Health; Louis W. Spolyar, M.D., chief, Bureau of Industrial Hygiene, State Board of Health; O. T. Allen, M.D., member of Committee on Conservation of Vision; and N. M. Beatty, M.D., member of Committee on Indiana Inter-Professional Health Council.

The statements of Receipts and Expenditures for May and June for the association committees and for April, May and June for THE JOURNAL were approved.

Membership Report:

Numbers of members July 27, 1940	3108
	(90 hon. mems.)
Number of members July 27, 1939	3087
Gain over last year	21
Number of members Dec. 31, 1939	3145

1940 Annual Session at French Lick, Tuesday, Wednesday and Thursday, October 29, 30 and 31, 1940

Dr. Harvey states that the annual health officers meeting undoubtedly will be held Monday, the day preceding the state meeting at French Lick.

Commercial exhibit. 29 spaces sold; 5 to be sold.

Scientific program. All places are filled on the general program and all sectional programs are completed with the exception of the program for the Section on Surgery.

Banquet speakers. Frank H. Lahey, M.D., president-elect of the American Medical Association, and Walter McCarty, managing editor of The Indianapolis *News*, are to be the two principal speakers on the banquet program.

Special guests at House of Delegates' meeting. The committee approved the arrangements to have Dr. Irvin Abell, who will speak on the National Physicians' Committee, and Dr. Fred W. Rankin, who will speak upon medical preparedness, present at the opening meeting of the House of Delegates, October 29. Dr. Rankin is medical director of the Fifth Corps Area.

Badges. The committee approved ribbon badges, which were chosen by the arrangements committee of the Orange County and Third District Medical Societies, but left the preliminary selection up to the executive secretary who is to bring samples before the next meeting of the committee.

Certificate of appreciation for Dr. VanBuskirk

signed by officials and to be presented by Dr. Ruddell at the annual banquet.

Ex-service men's luncheon. The committee approved the plan to make this something unusual this year and approved the suggestion that an invitation as principal speaker be sent to Julius Ochs Adler, general manager of the New York *Times*. The committee suggested that not only ex-service men but all members of the association should be invited to this luncheon. Arrangements should be made for special class and fraternity groups to sit together at their own tables.

Legislative, Legal and Social Security Matters

National

Arrangements have been made for Dr. F. S. Crockett, a member of the legislative committee of the American Medical Association, to contact Wendell Willkie and discuss with him general medical and health problems.

Report received from the A.M.A. that H.R. 8963, to permit chiropractors to treat Federal employees, is not being urged for passage at the present time.

Local

Attention of the committee was called to a recent meeting of the Grant County Medical Society where Dr. Ernest Jones of the Richmond State Hospital recommended a change in the procedure in regard to commitment of patients to insane hospitals. The committee ordered that this be referred to the Mental Health Committee.

Bulletin of the Academy of Medicine of Cincinnati in regard to barbiturates brought to the attention of the Executive Committee. The Executive Committee authorized that this matter be referred to Dr. Norman Beatty, co-chairman of the Legislative committee, and chairman of the committee of the Indiana Inter-Professional Health Council which is now working on a barbiturate bill to be presented at the 1941 session of the legislature.

Bulletin from the Michigan State Medical Society in regard to the formation of academies separate and distinct from county medical societies to handle legislative matters brought to the attention of the committee.

Organization Matters

Dr. Nafe called the attention of the Executive Committee to the membership certificate which is given to each member of the St. Louis Medical Society and may be framed and placed on the wall of the physician's office. The committee suggested that a copy of such certificate be made for use in Indiana and presented to the Council for consideration at the meeting in October. It was suggested that such certificate should read as follows:

"INDIANA STATE MEDICAL ASSOCIATION

Membership Certificate

This is to certify that....., M.D. is a member, in good standing, of the Indiana State Medical Association and his local county medical society, has paid his annual dues for the year designated hereon, and is entitled to all the privileges of membership.

(Signed)

....., M.D., M.D.

Secretary. President."

These certificates are to be sent out with each membership card.

Letter of condolence written to Dr. William R. Davidson at the death of Mrs. Davidson, and his acknowledgment, brought to the attention of the committee.

Death of Dr. Austin Hayden. The committee approved the telegram of condolence which was sent from the headquarters office to Mrs. Austin Hayden expressing sympathy of the Indiana profession over the loss of Dr. Hayden. The letter from Mrs. Hayden was brought to the attention of the committee.

The committee authorized the headquarters office to write a letter to Dr. Norman Beatty, co-chairman of the legislative committee, expressing sympathy in the loss of his mother.

Letter from Dr. Charles E. Gillespie, enclosing a note of commendation in regard to the optics course which he has sponsored, brought to the attention of the committee.

National Physicians' Committee. Advertisements published by the National Physicians' Committee brought to the attention of the Executive Committee.

Group Hospitalization and Group Medical Practice

Material from J. D. Laux, executive director of the Michigan Medical Service, brought to the attention of the committee. This is being kept on file at the state headquarters office.

Medical Economics

Correspondence between Mr. Stump and Rollen Waterson, executive secretary of the Lake County Medical Society, in regard to physicians' rights in hospitals brought to the attention of the committee along with letters from J. W. Holloway, Jr., acting director of the Bureau of Legal Medicine and Legislation of the American Medical Association, in regard to this subject.

Letter received from Vigo County Medical Society stating that the recent resolution in regard to the regulations of maternity care as promulgated by the State Department of Public Welfare which had been presented at a previous meeting of the Executive Committee has been recalled for further consideration by that county medical society.

The request of the Vanderburgh County Medical Society in regard to township trustees paying the medical society for services rendered the indigent sick brought to the attention of the committee. Albert Stump, the attorney for the association, expressed the opinion that he felt that the handling of such funds in this manner is perfectly legal. At the request of the headquarters office information has been sent to the Vanderburgh County Medical Society from local county medical societies who use such procedures in paying for services rendered indigent patients.

Request for physician at Orland, Indiana, brought to the attention of the Executive Committee. The committee asked that this letter be re-

ferred to Dr. A. J. Sparks, councilor of the Twelfth District.

Request received from the Linde Air Products Company that the state association send out an announcement calling attention of the local county medical societies to scientific moving pictures which are prepared by the Linde Air Products Company. As the Linde Air Products Company does not exhibit at the state meeting and as it does not advertise in the state JOURNAL, the committee felt that it was unfair to those organizations which do advertise and do exhibit to send out any special announcements from the headquarters office in regard to any scientific moving picture prepared by that company. If the company itself desired to send out an announcement to the county medical societies, there of course would be no objection by the Executive Committee.

Request of the Lake County Medical Society for information concerning the admission of patients to the University Hospitals brought to the attention of the committee. It is understood that conferences between Rollen Waterson, the executive secretary of the Lake County Medical Society, and Dr. J. D. VanNuys, medical director in charge of admissions to the three University hospitals, Riley, Long and Coleman, are progressing satisfactorily and that the information desired by the Lake County Medical Society will be forthcoming.

Letter from Dr. R. B. Smallwood of Bedford which contained the footnote, "I notice the school has acquired 12 acres of land to build more hospitals as per our earlier prediction," brought to the attention of the committee. The members of the committee said that they knew of no contemplated building expansion program but they felt that this land was acquired to do away with an unsightly slum district which adjoined the grounds of the medical center.

Monthly WPA report received by the committee.

The executive secretary was instructed to write the secretary of the Montgomery County Medical Society to obtain information in regard to the examination center that was set up by the Farm Security Administration for the physical examination of its clients in Montgomery county. The committee also was to re-state its agreement with the Farm Security Administration officials in this communication and find out if this work was done by the Farm Security Administration along the lines specified in their agreement with the Executive Committee. The committee was particularly anxious to know if the Farm Security Administration had received the consent of the Montgomery County Medical Society for this activity.

Sickness Insurance and Socialized Medicine

The committee was informed that a meeting of the St. Joseph County Farm Bureau was held recently at which Paul Waddell, executive secretary of the St. Joseph Medical Society, made a talk in opposition to socialized medicine.

State Board of Medical Registration and Examination and Cult Study Committee

The case against Harold A. Davis at Richmond in which he was enjoined from practicing medicine without a license brought to the attention of the committee.

Graduate Education

A report in regard to the meeting of the Associated State Postgraduate Committees, which was held in New York City at the time of the A.M.A. meeting, by Dr. H. B. Mettel, chief of the Bureau of Maternal and Child-Health of the Indiana State Board of Health, who attended that meeting as a representative of the state medical association, brought to the attention of the committee. Dr. Mettel attended that meeting as an alternate for Dr. Herman Baker, chairman of the Committee on Medical Education and Hospitals of the Indiana State Medical Association, who could not attend. Dr. Mettel's report was forwarded to Dr. Baker and the postgraduate committee.

Postgraduate courses for negro physicians were discussed by the committee as a result of a questionnaire which was received from Howard University at Washington, D. C., concerning this type of education in Indiana.

Proposed Joint Meeting of Health Groups

Dr. Norman Beatty informed the Executive Committee of the proposed joint meeting of health groups under the direction of the Indiana Inter-Professional Health Council. This proposal is that the annual meetings of the state medical, dental, nurses', pharmaceutical and tuberculosis associations all be held in Indianapolis at the same time in 1941. The proposal is that this joint meeting be held in April and that each group have its regular daytime schedule of meetings but have joint evening sessions. The Executive Committee felt that this is a matter which should be referred to the House of Delegates and Dr. Beatty was authorized to make this proposal to the House at the annual session at French Lick in October.

National Defense

The following matters in regard to national defense were brought to the attention of and discussed by the committee:

More than 600 Indiana State Medical Association questionnaires returned to date.

Dr. Charles R. Bird approved as representative from Indiana on the Medical Preparedness Committee of the American Medical Association.

Each councilor is to see that each county society in his district has an M-day committee.

All efforts will be made to have A.M.A. questionnaires returned.

Suggestions of Dr. Herman Baker as to program brought to the attention of the committee.

Telegrams and letters from Dr. Morris Fishbein and Dr. Olin West were brought to the attention of the committee.

Corps Area plan submitted to Dr. Fred W. Ran-

kin, medical director of the Fifth Corps Area, approved by the committee.

Statement of Committee on Medical Preparedness of the American Medical Association brought to attention of the committee.

Release from Ohio State Medical Association brought to attention of committee.

Annual Meeting of the Indiana State Medical, Dental and Pharmaceutical Association

Dr. Mitchell reported upon the annual meeting of the Indiana State Medical, Dental and Pharmaceutical Association which he and the executive secretary of the state medical association attended at Richmond on June 26. This group is composed of negro physicians, dentists, and pharmacists. It was pointed out at that meeting that negro dentists are admitted to the state dental association.

New Opportunities for Health Broadcasting

New channels are to be assigned by the Federal Communications Commission to educational institutions for educational broadcasts. Thus new opportunities for health broadcasting will be presented. The committee suggested that this matter be discussed by the Bureau of Publicity.

Report by Dr. O. T. Allen, Committee on Conservation of Vision

Dr. Allen, representing Dr. E. E. Holland of Richmond, chairman of the Committee on Conservation of Vision, attended the meeting of the Executive Committee and discussed the following two questions with the committee:

The committee is to have a conservation of vision exhibit at the state fair under the direction of the State Fair Committee. The cost of this exhibit will be $25.00. Last year this amount was paid by the Indiana Academy of Ophthalmology and Otolaryngology. The Executive Committee felt that the funds set aside in the budget for either the Conservation of Vision Committee or the State Fair Committee should take care of this item this year.

Dr. Allen reported that a round table discussion was being planned for the members of the county medical society conservation of vision committees. He wanted to know what time would be suitable for this luncheon. The committee felt that this luncheon should not conflict with the military preparedness luncheon if another time could possibly be arranged for it.

Committee on Industrial Health

Following a meeting of the Committee on Industrial Health, Dr. C. V. Rozelle, chairman, reported to the Executive Committee an outline of suggestions from his committee. The Executive Committee felt that this statement should be embodied in the annual report of the Committee on Industrial Health and placed before the House of Delegates for its consideration.

The Journal

Professional cards. The committee went on record approving the continuation of uniform professional cards, stating that there should be no devi-

PROFESSIONAL PROTECTION



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ation from the customary practice in printing these cards.

Question was brought up by the committee as to the time limit that a professional card may be carried in THE JOURNAL with the name of a physician who has retired from practice or who is deceased. The ruling of the committee in regard to this on a previous occasion is to be brought to the attention of the committee at its next meeting.

Malpractice

Study of malpractice policies of various companies. The committee suggested that perhaps someone could be obtained from the business school at Butler to make this survey.

Announcement made by Byron H. Somers, president of the Medical Protective Company, that the Medical Protective Company may return some of its departments to Fort Wayne.

Letter from Dr. Earl VanReed of Lafayette, showing that the malpractice insurance rates are increasing, reviewed by the committee.

Next Meeting of the Committee

Dr. Austin invited the committee to hold its next meeting at his cottage at Webster Lake, the meeting to be held on either Sunday, September 1, or on Sunday, September 8.

AMENDMENTS TO THE CONSTITUTION OF THE INDIANA STATE MEDICAL ASSOCIATION TO BE CONSIDERED AT THE FRENCH LICK SESSION

Resolution introduced by Dr. Ira Perry at the 1938 session:

"BE IT RESOLVED, That Section 3 of Article IX of the Constitution be amended as follows:

"By striking out the following words: 'No delegate shall be eligible to any office named in the preceding section, except that of councilor'."

From reports of Reference Committee on Amendments to the Constitution and By-Laws of the 1938 meeting of the House of Delegates (published in THE JOURNAL, page 657, November, 1938):

Also, in order to conform to the Constitution and By-Laws of the American Medical Association, we recommend this change in Article IV, Section 5, of our Constitution, to read: "Who has attained the age of sixty-five years,"—this instead of seventy-five years as is now provided for.

From report of Reference Committee on Amendments to the Constitution and By-Laws, 1939 meeting of the House of Delegates (published in THE JOURNAL, page 666, November, 1939):

(1) That Article II of the Constitution of the Indiana State Medical Association be amended by striking out the words "to guard and foster the material interests of its members and".

(1) That action on the Asher resolution regarding the migratory members of the medical and nursing profession, be indefinitely postponed because of possible conflict with the Constitution of the United States.

INDIANA STATE BOARD OF HEALTH

BUREAU OF COMMUNICABLE DISEASES

MONTHLY REPORT, JULY, 1940

Diseases	*1940 July*	*1940 June*	*1940 May*	*1939 July*	*1938 July*
Tuberculosis	147	172	137	172	207
Chickenpox	26	208	309	43	28
Measles	29	77	57	29	109
Scarlet Fever	61	198	421	103	99
Smallpox	4	16	12	36	79
Typhoid Fever	14	19	17	31	53
Whooping Cough	75	137	115	568	69
Diphtheria	19	13	14	30	39
Influenza	8	25	18	38	33
Pneumonia	29	55	81	25	44
Mumps	33	205	624	40	14
Poliomyelitis	19	2	0	1	3
Meningitis	4	7	2	5	3
Rocky Mountain Spotted Fever	3	2	0	0	1
Undulant Fever	7	13	4	4	11
Dysentery	1	0	0	0	1
Encephalitis	2	0	0	0	0
Tetanus	1	2	0	0	0
Tularemia	1	2	0	0	1

COMMERCIAL ANNOUNCEMENTS

FOR SALE—Used Victor Mobile X-ray unit equipped with 30 MA Coolidge Tube and head fluoroscope. Ideal unit for small office. Condition of unit shows evidence of careful use. Write for photograph. Will sell cheap. C. D. Ceske, 1026 Drexel Avenue, Indianapolis, Indiana.

FOR SALE—Drugs and office equipment of the late Dr. G. G. Griffith. Good location for physician in strip mining community. Address Mrs. G. G. Griffith, Spurgeon, Indiana.

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THE RECENT OUTBREAK OF POLIOMYELITIS IN INDIANA

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THURMAN B. RICE, M.D.†
INDIANAPOLIS

The authors were asked by the Indiana State Medical Association to prepare this article as a current report of the present and recently past situation in the State. It is a report to the profession and makes no claim of scientific originality. The material here presented is intended for medical distribution.—V. K. H.

Indiana has been fortunate for several years in that it has largely escaped poliomyelitis whereas the neighboring states have suffered from repeated attacks. We can claim no credit for having so largely escaped all of this time, and the surrounding cities and states deserve absolutely no criticism because they have had from time to time a good bit of this disease. This year we have suffered along with most of the other Central States.

By the middle of the summer, or even before, it was apparent that an outbreak was probably on its way. Elkhart and St. Joseph counties were hit first, and serious concern was felt by physicians and health authorities. With the advance of the season other communities became involved, most of them being in the middle of the two northern tiers of counties, but others were found in widely spread communities with no apparent connection with the first cases. One early focus was found in the middle eastern section about Connersville. If a line is drawn across the State from the Calumet region to the southeast corner near Cincinnati, by far the greater number of the reported cases are found to be to the east and north of this line. Why this distribution should prevail is utterly unknown. A very few cases were reported in the south and western portion of the State, but probably no more than is usually seen in normal years, and so we feel that these cases may possibly be considered to be endemic rather than epidemic.

In all, to the present date, September 15, there have been about 400 cases reported to the health authorities. Doubtless there have been many non-paralytic cases which have not consulted a physician, have been missed in diagnosis, or have not been reported. The cases are distributed through the summer as follows:

	Cases
June	2
July	19
August week ending 3	15
August week ending 10	41
August week ending 17	58
August week ending 24	79
August week ending 31	68
September week ending 7	81

It would appear from this that the peak has probably been reached, but it is too early to make prophecies as to when it will end further than to say that in all previous outbreaks the disease has declined rapidly as soon as cool weather has definitely arrived. We feel sure that the same will be true in this instance. Of the cases, approximately 10 per cent have been observed in adults or young adults. About 10 per cent of the victims have died (total number 37). Some of the persons already reported may yet die, and so it is possible that the figure is too low. Considering the much smaller number of adult patients, it is clear that the case fatality rate has been much higher in the upper age levels. It is too early to make estimates concerning the percentage of patients who will show permanent paralysis. The epidemic seems to be of somewhat more than the usual severity, and we may expect a corresponding result.

There has, of course, been much speculation as to the manner in which the disease is spread. A number of research workers have been active in trying

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to settle this point, but as yet nothing has been definitely proved or disproved. We shall review some of the more persistent theories with brief comments.

1. Some believe that the virus is insect borne, being carried by one or another of the blood-sucking insects. The seasonal nature of the disease leads naturally to this assumption, as does the fact that cases come down which seem to have no relation to each other while real contacts remain healthy. Many insects have been studied and eliminated, but evidently not *all* insects have been eliminated. A strong point against the insect theory is the fact that the virus is not found in the blood of the patient. This is an important point because all other diseases spread by the bite of insects show the infective agent in the blood of the patient. How can blood-sucking insects spread the virus if it is not found in appreciable amount in the blood? It must be borne in mind, however, that insects are not entirely eliminated. It may be that they carry the virus in other ways.

2. The respiratory route seems a logical one. In other words the virus is passed from person to person or from carrier to prospective patient by means of the respiratory discharges, just as diphtheria, measles or scarlet fever are passed. Against this theory is the fact that respiratory diseases are most common in the cooler months when people live indoors, while poliomyelitis is least prevalent at that time. Again, it is very unusual for a person in contact with a definite case to contract the disease. There is said to be no well authenticated case in which a doctor or a nurse has caught the disease in paralytic form under hospital conditions. The Los Angeles epidemic of a few years ago is often given as an exception, but most authorities now agree that this epidemic was not true polio. The Riley Hospital recently has had nearly a hundred cases, and there have been other hospitals with about as many; yet no doctor, nurse, or patient has been the victim of cross infection. It is true that one nurse had the disease and, indeed, died of it in the recent epidemic, but she evidently caught it when on vacation while she was not nursing. It is impossible to suppose the technique is always so good as to avoid an occasional cross infection when the disease is carried by the respiratory route.

It has been customary to warn people against taking their children into crowds, but there is no real proof that crowds are dangerous. Many of the patients who have come down have been country people who had had very few contacts indeed. There is no evidence that it will be dangerous for the schools to open, though to be sure the school and health authorities are justified in being cautious. The fact that children are *compelled* to go to school puts a heavy burden of responsibility upon authorities and so they may be excused for being quite conservative.

3. The virus is found in the discharges from the intestinal tract, and the patients show marked gastro-intestinal symptoms in nearly every case. This would seem to indicate that the disease is transmitted in the same way that typhoid and other related diseases are carried. There has been some epidemiological evidence of this in the northern counties where the disease seemed to spread along the river, but the evidence is quite inconclusive. The virus could evidently pass through a sand filter and might not be killed by the chlorine in the water, but there is the irrefutable fact that many persons have contracted the disease even though there was no suspicion of the water. Certainly this cannot explain all of the cases; possibly it explains none of them.

Swimming in polluted water has been accused, but most of the patients have not been swimming. Chilling and fatigue—which are often observed in those who have been swimming—are believed to be rather important determining factors. It has been shown that animals that are chilled or worn out with fatigue are definitely more susceptible to animal inoculation with the virus of poliomyelitis. Certainly in a time like this parents should avoid permitting their children to become too tired or too much chilled. In case a child seems indisposed it would seem only common sense that he or she should be put to bed and kept warm and at complete rest. Such a course of action might be expected to serve a useful purpose, though it would be impossible to *prove* that such action has prevented either the disease or its consequences.

4. There are those who believe that the virus is present in the population all or at least a large part of the time and that under certain meteorological or environmental conditions it becomes activated and then is dangerous. This might seem to explain the fact that it appears in widely separated communities at about the same time. While such a view is perfectly plausible, it is a rather dangerous philosophy because it would seem to take the prospect of solving the mystery of the disease out of the scientific realm. Such a view engenders a sort of fatalistic and semi-supernatural attitude which may be very dangerous. Certainly there is no direct proof of such a theory. Most of the evidence pointing in this direction is really negative and may seem plausible only because we have so far failed to find any positive explanation.

5. Some have supposed that this may be a deficiency disease of some sort. The missing safety element has been supposed to be some unknown vitamin or hormone. The depletion of the salt in the system during the hot months has been guessed at as the cause. So far as we know there is no convincing direct evidence that this explanation can be accepted. Evidently such a deficiency could only serve as a predisposing cause; it could hardly be the cause itself. Evidence against this is seen in the observation—probably not a proved fact—that vigorous, plump, healthy children seem to se somewhat *more* susceptible to it. It is claimed that blond and possibly curly-haired children are more susceptible. This is not finally proved by any means.

6. It is conceivable that this is a disease of dual etiology. The virus may cause the virus phase of the disease, while some other unknown virus or bacterium may come into the picture to complete the ensemble. A similar example is seen in the virus which causes influenza, though it is the pneumococcus or some other organism which follows the virus and causes the pneumonia. There are many examples of this principle. It may well be that we have been so intent upon the virus that is Villian Number One that we have entirely missed the other virus or organism that is Villian Number Two.

7. Miscellaneous conjectures of a most bizarre nature might be mentioned. Most of them are probably purely accidental and coincidental, but in some instances they seem quite convincing to those conceiving them. The role of pets and other animals as intermediates in the transference of infection has been advanced. Relation to hot, dry weather and to latitude has been proposed. Dust has been mentioned as a possible carrier. These guesses are interesting. They are by no means convincing. It is entirely possible—even probable according to those with vivid imaginations—that some "long shot" may turn out to be the correct explanation, and for that reason the modern research worker leaves unturned no possible stone in his search for the true explanation of the manner of spread.

Probably it is safe to say that the reason the disease is so evasive lies in the fact that it is much more frequent in its non-paralytic form than we have supposed. There is a maxim which runs, "Poliomyelitis is a common disease, but infantile paralysis is rare." Certain it is that a large percentage of adults have protective immune bodies in their blood serum as can be proved by the fact that their serum will neutralize the virus and protect animals inoculated with such neutralized virus. This doubtless accounts for the fact that adults are relatively immune. It is likely that the disease can be transmitted from at least the three following groups of persons: cases, healthy carriers, and unrecognized non-paralytic or abortive cases. Possibly there are other sources of the virus. It would seem unlikely that the common animals carry the virus because it has been possible to transmit the disease experimentally only to certain Old World species and the chimpanzee. The cotton rat of the South is apparently susceptible to the Lansing strain of the virus but immune to other strains. It seems to occur spontaneously only in man.

It will be seen that a disease of this sort is exceedingly hard to run down. The difficulty is made greater by the fact that simple cultural methods canot be used. The virus can only be grown experimentally in the animals mentioned above, and at this time there are no monkeys available in the United States. The value of the cotton rat as an experimental animal remains to be established, but it is unlikely that it can be widely used.

We are often asked what the incubation period may be. It is easy to see that this question cannot be answered finally until we are able to know when a given contamination took place. If it is safe to depend upon animal experiments, we may conclude that the incubation period is about one to three weeks. Certain random epidemiological observations tend to confirm this estimate. The disease rarely spreads from one member of a family to another in paralytic form and so we do not have a chance to observe incubation periods accurately. When more than one person in a family comes down, it is usually rather evident that they all contracted the disease at about the same time and that affected members are primary cases.

In the face of an epidemic one wonders what can be done. Evidently there is little that can be recommended to prevent the spread of the infection when we must confess that we do not know how the disease is carried. It will not be wise to freeze all activities of the community because such procedure is nearly sure to cause resentment, to do little or no good, and more than likely to foster a state of hysteria which may be very bad. All obvious contacts should be avoided, of course, and all actual cases should be isolated. It would be foolish to go into crowds unnecessarily, though there might be no danger. If swimming seems to be a contributing factor, then swimming can be dropped. It will be well to remember that it has been very rare indeed for more than 0.1% of the population to be attacked. This is only one person in a thousand. Many other dangerous and crippling diseases are far more dangerous than this—tuberculosis, pneumonia, diphtheria, syphilis, et al—and yet little fuss is made about them. Publicity will need to be handled with care to prevent undue alarm. The truth should be told to the public, but "the truth should not be exaggerated."

In case a child becomes ill in any suspicious way, he should be put to bed immediately and the family physician called. It is not our purpose to describe the disease clinically, but we may be pardoned for mentioning the following symptoms (all of which are observed in other diseases) of the non-paralytic form or phase of the disease: headache, temperature, restlessness (especially at night), gastrointestinal disturbance as loss of appetite, nausea, vomiting, pain in the abdomen, often diarrhea and a moderately sore or red throat. It is impossible to say that a case such as the above is or is not actually non-paralytic polio. If the back is stiff (poker spine), the diagnosis usually can be made rather definitely by spinal puncture which in a true case will give an increased lymphocytic cell count. If the muscles are sore, tender, aching, weak or paralyzed, the diagnosis of infantile paralysis or paralytic poliomyelities is rather obvious. The case should be reported promptly to the health authorities, the patient isolated, and the best available treatment set up.

Concerning treatment we shall say only that absolute bed rest is indicated. If the case is to be moved to a hospital, the utmost care must be taken in handling the patient inasmuch as he or she can

Year	1940 (to date)	1939	1938	1937	1936	1935	1934	1933	1932	1931	1930	1929
Cases	about 400	38	17	146	56	49	67	46	29	60	165	25
Deaths	37	4	12	27	16	9	22	11	8	19	26	11

be seriously injured by roughness. It is generally said that such a patient should be handled like a patient with a broken back or a fractured skull. It may well be that the patient is better off in his own bed than in the best hospital if he must be moved to the hospital when he is acutely ill. The limbs should be splinted so that motion of any sort can be avoided. These splints can be made of various light materials or can be obtained from various sources such as the local depository of the National Foundation for Infantile Paralysis or the Welfare Department of the State Government. A number of respirators are available in the State. They are best used in the cases that have simple respiratory paralysis (muscles of respiration). Cases of this sort will always show some paralysis of the shoulders and arms before they actually need the respirator. Bulbar cases are also put in the respirator in many instances, but the results are not so good here because other vital functions are involved. The public has great confidence in the respirator, and the parents of a victim may feel that once the child is in such an apparatus he or she will be all right. This optimism is not warranted. Most of the patients who are so badly involved as to need such treatment will die, and most of those who live will be very badly paralyzed.

After the child is definitely convalescent there is very much that can be done. All such treatment, however, must be in the care of those professional people who have the training, the experience and the equipment to do such work. This is no place for the strong-armed physical therapeutist or the zealous advocate of massage, electrical treatment, swimming, exercise, passive motion or other manipulation. All of these means of treatment are probably useful when scientifically handled, but likewise all of them are very dangerous when injudiciously done.

The parent can be safely told that the child will be definitely less paralyzed than he is at the height of the disease. Many of the cases will show no paralysis at any time, and others will show complete recovery even though the paralysis is rather severe at the height of the disease. All may be expected to show some improvement over a period of at least six months and possibly as long as a year. All children can be at least somewhat rehabilitated, re-educated, and adjusted even after the permanent stage is reached if they are not allowed to become too pampered or distorted mentally. It is possible for paralyzed persons to achieve great success in this day and age. Braces, mechanical aids, surgical operations on muscles and tendons, vocational training and rehabilitation offer immense opportunity. By all means the parents of the permanently paralyzed child should get in touch with the Division for Crippled Children or some private organization or physician who may be expected to give expert aid.

There are those who suppose that infantile paralysis is present in Indiana only this year and that in other years we are entirely free of it. This is by no means the case as the following figures will show. Cases and deaths in other years of the decade just past are shown above.

It will be seen from the above that the disease is present every year in endemic form, and in 1930 and 1937 reached proportions somewhat comparable to the present epidemic. It will be noted that a much larger percentage of the reported cases died in those years. We believe that this clearly indicates that many non-paralytic cases were not recognized and not reported. Please note that in 1930, 1934, and 1937 the number of deaths is above 20, and more than half as many as have so far died in 1940. Even in this "epidemic" year the deaths will be less than for diphtheria, and far less (even among children alone) than from pneumonia, tuberculosis, syphilis, accidents and other diseases which not only kill but also maim.

No serum, vaccine, or chemical drug so far prepared has stood the test of practical use either for the prevention or the treatment of infantile paralysis. On the contrary some of these agencies formerly recommended are thought by many observers to have been harmful. The medical profession hopes that research soon will give us reliable therapeutic and prophylactic measures but admits that at the present time this is a most baffling infection. In the meantime we shall all do the best we can, knowing that we shall soon come to that season of the year when the disease wanes.

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HOTEL, FRENCH LICK,
OCTOBER 29, 30, AND 31

SODIUM SULFAPYRIDINE: ITS CHEMOTHERAPEUTIC ACTION AND TOXICITY*

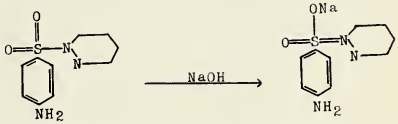
H. M. POWELL, SC.D.
K. K. CHEN, PH.D., M.D.
INDIANAPOLIS

The efficacy of sulfapyridine in the treatment of lobar pneumonia and other infections is being gradually established by numerous investigators. Owing to its insolubility and difficult absorption, the blood concentration of experimental animals and men after administration of the drug is erratic and low—not in any way comparable to sulfanilamide. To overcome this shortcoming, Marshall, Bratton, and Litchfield[1] prepared the mono-sodium salt of sulfapyridine. The toxicity and clinical trials of this product were reported by Marshall and Litchfield,[2] Marshall and Long,[3] and Long.[4] Experimental studies were also undertaken by Molitor and Robinson,[5] Raiziss, Severac, Moetsch, and Clemence,[6] Lowell, Spring and Finland,[7] and Antopol and Robinson.[8] Briefly, sodium sulfapyridine is more toxic than sodium sulfanilamide on the basis of blood concentration. Like sulfapyridine, sodium sulfapyridine has an antipneumococcic action, and in large doses it produces renal damages in mice, rats, rabbits, and monkeys due to the deposition of acetylsulfapyridine which is formed in the body following medication. Further clinical reports have been made by Hodes, Gimbel, and Burnett,[9] Hodes, Stifler, Walker, McCarty and Shirley,[10] Finland, Lowell, Spring and Taylor,[11] Dowling and Abernethy,[12] Abernethy, Dowling and Hartman,[13] Banks,[14] Whittemore, Royster and Riedel,[15] and Taplan, Jacox and Howland.[16] In men sodium sulfapyridine should be given by vein, and is indicated when an adequate blood concentration is promptly required as in an emergency, or when a patient cannot retain full doses of sulfapyridine by mouth because of nausea and vomiting.

The data in the present report were obtained in animals with sodium sulfapyridine. A few closely related compounds were included for the sake of direct comparison. The plan of study was similar to that of a previous communication.[17] It is the hope of the authors that the results will serve as a guide to clinicians in their cautious use of this soluble product.

GENERAL PROPERTIES

Sulfapyridine is not a true acid, but in alkaline solution it perhaps behaves like a pseudo-acid, and thus forms the sodium salt in the following manner:



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[4] Long, P. H.: Sulfapyridine and pneumonia. *Science* **89**:10, 1939.

[5] Molitor, H. and Robinson, H.: Toxic manifestations after oral administration of sodium sulfapyridine. *Proc. Soc. Exper. Biol. & Med.* **41**:409, 1939.

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[7] Lowell, F. C., Spring, W. C. Jr., and Finland, M.: Bactericidal action of sodium sulfapyridine and of glucose-sulfapyridine solution in human blood. *J. Clin. Invest.* **19**:215, 1940.

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[9] Hodes, H. L., Gimbel, H. S., and Burnett, G. W.: Treatment of pneumococcic meningitis with sulfapyridine and the sodium salt of sulfapyridine. *J.A.M.A.* **113**:1614, 1939.

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[13] Abernethy, T. J., Dowling, H. F., and Hartman, C. R.: Treatment of lobar pneumonia with sulfapyridine and sodium sulfapyridine: Effective blood levels. *Ann. Int. Med.* **13**:1121, 1940.

[14] Banks, H. S.: Primary peritonitis in scarlet fever treated with sodium salt of M. & B. 693. *Lancet* **1**:983, 1939.

[15] Whittemore, W. L., Royster, C. L., and Riedel, P. A.: Intravenous and rectal administration of sulfapyridine in pneumococcic pneumonia. *J.A.M.A.* **114**:940, 1940.

[16] Taplin, G. V., Jacox, R. F., and Howland, J. W.: The use of sodium sulfapyridine by hypodermoclysis. *J.A.M.A.* **114**:1733, 1940.

[17] Powell, H. M. and Chen, K. K.: The action of sulfapyridine (2-sulfanilyl aminopyridine). *J. Pharmacol. & Exper. Therap.* **67**:79, 1939.

* From the Lilly Research Laboratories, Eli Lilly and Company, Indianapolis.

Table 1. Chemotherapeutic Action of Sodium Sulfapyridine in Mice Infected with Pneumococcus and Streptococcus

Orgonism	Culture Dose	Drug	Administrotion	Dose of Drug	Day of death of each infected mouse or survival for 14 days marked S									
	cc. per mouse			mgm. per mouse										
				5x5	4	4	4	4	4	4	4	4	4	4
				10x5	4	4	4	4	5	S	S	S	S	S
Pneumococcus		Sodium		20x5	1	1	1	1	4	S	S	S	S	S
Type I	10^{-4}	Sulfapyridine	Oral	30x5	1	1	1	1	1	1	5	S	S	S
				40x5	1	1	1	1	1	1	1	1	1	1
				50x5	1	1	1	1	1	1	1	1	1	1
		Sulfapyridine	Oral	30x5	4	4	4	5	5	5	S	S	S	S
		none (control)			1	1	1	1	1	1	1	1	2	2
				5x2	5	6	7	7	8	10	S	S	S	S
				10x2	6	7	7	7	8	8	10	S	S	S
				20x2	1	1	1	1	1	1	1	1	1	S
Streptococcus	10^{-4}	Sodium		30x2	1	1	1	1	1	1	1	1	1	1
		Sulfapyridine	Subcutaneous	40x2	1	1	1	1	1	1	1	1	1	1
				50x2	1	1	1	1	1	1	1	1	1	1
				60x2	1	1	1	1	1	1	1	1	1	1
		Sulfanilamide	Subcutaneous	5x2	5	5	6	7	7	10	S	S	S	S
		none (control)			1	1	1	1	1	1	1	1	1	2

Table 2. Chemotherapeutic Action of Sodium Sulfapyridine in Mice Infected with Various Culture Doses of Pneumococcus, Staphylococcus, and Meningococcus.

Organism	Culture Dose	Drug	Administration	Dose of Drug	Day of death of each infected mouse or survival for 14 days marked S									
	cc. per mouse			mgm. per mouse										
	10^{-8}				S	S	S	S	S	S	S	S	S	S
	10^{-7}	Sodium			S	S	S	S	S	S	S	S	S	S
	10^{-6}	Sulfapyridine	Oral	10x5	3	5	S	S	S	S	S	S	S	S
	10^{-5}				3	5	5	5	6	S	S	S	S	S
	10^{-4}				3	3	5	5	5	5	9	12	S	S
	10^{-8}				S	S	S	S	S	S	S	S	S	S
	10^{-7}				1	1	5	5	12	S	S	S	S	S
Pneumococcus Type I	10^{-6}	Sulfapyridine	Oral	30x5	3	3	5	5	5	5	5	5	S	S
	10^{-5}				2	S	S	S	S	S	S	S	S	S
	10^{-4}				2	5	S	S	S	S	S	S	S	S
	10^{-8}				1	1	1	2	2	S	S	S	S	S
	10^{-7}				1	1	1	1	1	2	2	2	S	S
	10^{-6}	none (control)			1	1	1	1	1	1	2	3	S	S
	10^{-5}				1	1	1	1	1	1	1	2	2	2
	10^{-4}				1	1	1	1	1	1	1	1	1	1
	10^{-4}	Sodium			1	1	2	13	S	S	S	S	S	S
	10^{-3}	Sulfapyridine	Subcutaneous	10x2	1	1	2	2	S	S	S	S	S	S
	10^{-2}				1	1	1	1	1	1	1	1	1	1
	10^{-4}				1	1	1	2	2	4	5	S	S	S
Staphylococcus	10^{-3}	Sulfapyridine	Subcutaneous	30x2	1	1	1	1	1	1	1	1	4	S
	10^{-2}				1	1	1	1	1	1	1	1	1	1
	10^{-5}				4	4	S	S	S	S	S	S	S	S
	10^{-4}	none (control)			1	1	1	1	1	1	1	1	1	1
	10^{-3}				1	1	1	1	1	1	1	1	1	1
	10^{-2}				1	1	1	1	1	1	1	1	1	1
	10^{-8}				2	S	S	S	S					
	10^{-7}	Sodium			S	S	S	S	S					
	10^{-6}	Sulfapyridine	Subcutaneous	10x2	9	S	S	S	S					
	10^{-4}				2	S	S	S	S					
	10^{-5}				2	S	S	S	S					
	10^{-8}				10	S	S	S	S					
	10^{-7}				2	4	S	S	S					
Meningococcus	10^{-6}	Sulfapyridine	Subcutaneous	30x2	S	S	S	S	S					
	10^{-5}				S	S	S	S	S					
	10^{-4}				6	S	S	S	S					
	10^{-9}				2	S	S	S	S					
	10^{-8}				2	2	S	S	S					
	10^{-7}	none (control)			2	2	2	S	S					
	10^{-6}				2	2	S	S	S					
	10^{-5}				2	2	2	2	S					
	10^{-4}				2	2	2	2	2					

It melts at 316.3-316.8°C. and is very soluble in water, its solutions being alkaline in reaction. When a 10 per cent solution was applied locally to the rabbit's conjunctival sac, no irritating manifestations were noted. If injected subcutaneously or intramuscularly, necrosis usually took place. No damage could be detected in rabbits if the drug was injected intravenously. However, if the marginal vein was deliberately blocked by means of fingers for 10 minutes during injection, thrombosis resulted.

CHEMOTHERAPEUTIC ACTION

A series of white mice was each inoculated intraperitoneally with the Park strain of pneumococcus type I and streptococcus "C203." The culture was 16 hours old, and the dose of the culture was 10^{-4} cc. per animal diluted to 0.5 cc. Sodium sulfapyridine in the case of pneumococcus was given by mouth in various doses 1 and 8 hours after inoculation, and one dose each on three successive days—a total of 5 doses. With streptococcus, the drug was administered subcutaneously 1 and 5 hours after infection—a total of 2 doses. The duration of observation was 14 days in all instances.

The figures in Table 1 demonstrate very plainly that by oral administration the optimal dose of sodium sulfapyridine against pneumococcus is 10 milligrams given 5 times, and that against streptococcus 5-10 milligrams injected twice. Sulfapyridine fed in amounts 3 times as large barely produces results comparable to those of the sodium salt. By being soluble in water, and thus more easily absorbable, sodium sulfapyridine becomes 3 times as effective as the free "acid," weight for weight. Regarding streptococcus, sodium sulfapyridine appears to have the same potency as sulfanilamide. Control animals with both organisms all died on the first or second day.

Another series of experiments was conducted by varying the culture doses of pneumococcus the Park strain of type I, staphylococcus "Julianelle A no. 13," and meningococcus no. 57 type III. The last two organisms were suspended in a 5 per cent solution of mucin in order to increase the virulence. Each drug was used in its optimal dose as indicated in Table 2. It should be noted that sodium sulfapyridine in doses one-third as large as those of sulfapyridine in this group of mice proved to be slightly less effective in combating the pneumococcic infection. It, however, showed equally good results against meningococcus, and even better results against staphylococcus.

A third series of mouse experiments was carried out against pneumococcus type I by injection of sodium sulfapyridine through the tail vein. The dose schedule was the same as that by oral administration, but the amount of each dose on account of the toxicity of the drug was reduced to 6 mgm. per mouse. As shown in Table 3, sodium sulfapyridine prolonged life, but was not able to save the same even in relatively less severe infections. The majority of infected mice in another trial survived

Table 3. Intravenous Injection of Sodium Sulfapyridine in Mice Infected with Pneumococcus Type I

Drug	Dose	Dose of Pneumococcic Culture	Day of death of each infected mouse or survival for 14 days marked S									
	mgm. per mouse	cc. per mouse										
Sodium Sulfapyridine	6	10^{-3}	4	4	5	5	6	6	6	S	S	S
		10^{-4}	1	3	3	4	4	4	5	5	6	6
		10^{-5}	3	3	3	4	4	4	5	5	6	6
		10^{-6}	2	2	2	4	4	4	5	5	6	6
		10^{-7}	2	4	4	4	5	5	5	6	6	6
none (control)		10^{-3}	1	1	1	2	2	S	S	S	S	S
		10^{-4}	1	1	1	1	1	2	2	2	S	S
		10^{-5}	1	1	1	1	1	1	2	3	S	S
		10^{-6}	1	1	1	1	1	1	1	2	2	2
		10^{-7}	1	1	1	1	1	1	1	1	1	1

when intravenous injection was supplemented by oral administration of sulfapyridine. This point has a practical bearing, for it goes to show that sodium sulfapyridine injected intravenously only institutes a high blood concentration of the drug promptly, and in order to secure the maximal chemotherapeutic action, it must be combined with the oral use of sulfapyridine—just as Hodes, Gimbel and Burnett[9] advocated it in patients. Intravenous injection alone is not sufficient to sustain a prolonged and uniform level of effective concentration of the drug.

ACUTE TOXICITY

The median lethal doses, LD_{50}'s, of sodium sulfapyridine were determined by intravenous, subcutaneous, intramuscular, intraperitoneal, or oral administration, in mice, rats and guinea pigs. A glance at Table 4 will reveal the fact that the sodium salt, owing to its solubility and easy absorption, is considerably more toxic than sulfapyridine by any route of administration. Comparisons were made with sulfanilamide, sulfathiazole and its sodium salt, sulfamethylthiazole and its sodium salt, and sulfaphenylthiazole and its sodium salt. The last three pairs of compounds are particularly efficacious in staphylococcus infections. It appears that sodium sulfapyridine is less toxic by vein, but more toxic by mouth, than sulfanilamide, gram for gram. When injected intravenously in mice, sodium sulfapyridine has practically the same toxicity as sodium sulfathiazole, but it is less toxic than sodium sulfamethylthiazole or sodium sulfaphenylthiazole. Orally, the large lethal doses of sulfathiazole and sulfamethylthiazole, and the apparent inertness of sulfaphenylthiazole, are no indication of low toxicity, for they are due to the insolubility and lack of absorption of these products.

Dogs receiving sodium sulfapyridine intravenously in the dosage varying from 400 to 600 mgm. per kgm. experienced nausea, vomiting, and tonic convulsions, although they all recovered as indicated in Table 5. A dose of 200 mgm. per kgm. was apparently well tolerated. One monkey died from a quantity of 600 mgm. per kgm. given intra-

Table 4. Toxicity of Sodium Sulfapyridine as Compared with Its Allies

Drug	Animal	Administration	Dose	No. Died / No. Used	$LD_{50} \pm S.E.$
			gm. per kgm.		gm. per kgm.
Sodium Sulfapyridine	Mice	Oral	3.50	10/10	2.764 ± 0.113
			3.00	2/5	
			2.50	0/5	
			2.00	0/5	
		Subcutaneous	3.00	2/2	1.138 ± 0.077
			2.00	3/3	
			1.60	5/5	
			1.30	4/5	
			1.00	1/5	
		Intramuscular	2.00	2/2	1.096 ± 0.068
			1.50	5/5	
			1.20	3/5	
			1.00	2/5	
			0.80	0/5	
		Intraperitoneal	2.00	3/3	0.910 ± 0.026
			1.00	4/5	
			0.90	3/5	
			0.85	1/5	
			0.80	0/5	
		Intravenous	0.70	8/15	0.696 ± 0.018
			0.65	5/20	
			0.60	5/15	
			0.55	1/15	
			0.50	0/15	
	Rats	Oral	2.00	0/10	2.994 ± 0.102
			2.50	1/10	
			3.00	4/10	
			3.50	5/5	
			4.00	5/5	
		Intravenous	0.70	0/5	0.954 ± 0.030
			0.80	1/5	
			0.90	3/10	
			1.00	5/10	
			1.10	5/5	
			1.20	4/4	
	Guinea Pigs	Intravenous	0.60	2/10	0.693 ± 0.043
			0.70	3/10	
			0.80	10/10	
			0.90	10/10	
			1.00	10/10	
Sulfapyridine	Mice	Oral	*	*	> 34.0
		Intraperitoneal	*	*	27.49 ± 6.77
		Oral	*	*	5.09 ± 0.154
Sulfanilamide	Mice	Intravenous	0.40	2/10	0.587 ± 0.031
			0.45	1/15	
			0.50	7/20	
			0.55	12/20	
			0.60	6/20	
			0.65	11/15	
Sulfathiazole	Mice	Oral	10.00	1/5	12.77 ± 0.89
			12.00	2/5	
			14.00	2/5	
			16.00	5/5	
Sodium Sulfathiazole	Mice	Intravenous	0.60	0/5	0.708 ± 0.018
			0.70	2/8	
			0.80	5/5	
Sulfamethylthiazole	Mice	Oral	25.00	0/1	27.67 ± 0.52
			27.00	1/5	
			30.00	5/5	
Sodium Sulfamethylthiazole	Mice	Intravenous	0.50	1/5	0.555 ± 0.015
			0.55	2/8	
			0.60	5/5	
Sulfaphenylthiazole	Mice	Oral	20.00	0/3	> 39.0
			25.00	0/5	
			30.00	0/4	
			36.00	0/5	
			39.00	0/5	
Sodium Sulfaphenylthiazole	Mice	Intravenous	0.30	0/5	0.390 ± 0.017
			0.35	2/5	
			0.40	2/5	
			0.45	4/5	
			0.50	5/5	

* *Protocols published previously*[17]

venously. Smaller doses—200 to 400 mgm. per kgm.—failed to produce toxic symptoms in the same species of animals.

REPEATED ADMINISTRATION

Four dogs were given sodium sulfapyridine by mouth daily for 24 days: two with a dose of 0.5 gm. per kgm. each, and the other two with one of 0.25 gm. per kgm. each. During an observation period of 25 days, their body weights were recorded, and their blood and urine examined—all weekly. Two control dogs with no medication were also studied. At the end of experimentation, the animals had received total amounts of from 49.2 to 93.6 gm. each. None of the treated dogs lost

Table 5. Toxicity of Sodium Sulfapyridine (20 percent) in Dogs and Monkeys by Intravenous Injection

Animal	Number	Sex	Weight	Dose	Result
			kgm.	mgm. per kgm.	
Dog	1582	M	8.9	600	Vomiting, convulsions, recovery overnight
	1410	M	9.0	500	Vomiting, convulsions, recovery overnight
	1805	F	9.9	400	Vomiting, convulsions, recovery overnight
	1806	F	11.8	200	No toxic effects
Monkey	13	F	6.7	600	Convulsions, found dead next morning
	9	M	8.3	400	Refused to eat, otherwise no toxic effects
	7	F	6.8	200	No toxic effects

any weight, while the two control animals both became lighter due to some unknown cause. With one exception, no albumin appeared in the urine. The two dogs on the smaller dose each excreted a reducing substance, probably glucose, in the urine, once strong enough to give 3+ with Benedict's solution. The same, however, occurred with a control dog. The fluctuation of the hemoglobin content, the number of erythrocytes and leucocytes,

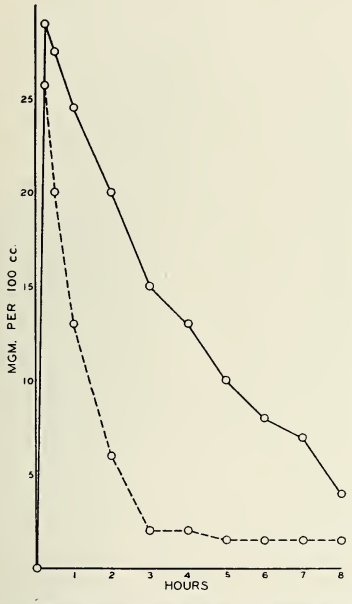


Figure 1. Blood Concentration following Intravenous Injection.

Rabbit no. 2771, male, weighing 2.3 kgm., was injected by the ear vein, a dose of sodium sulfapyridine amounting to 218 mgm. per kgm. Blood concentrations were determined at various intervals. The broken line indicates the free form, and the solid line the sum of the free and acetylated forms.

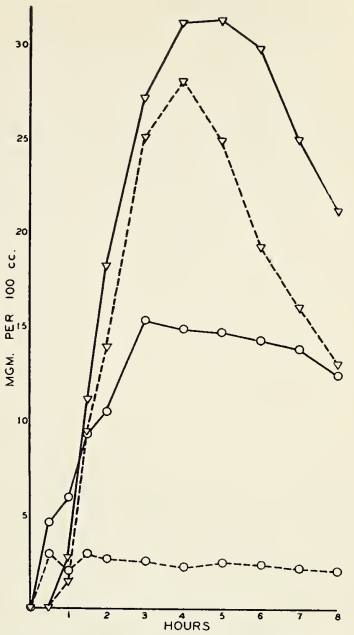


Figure 2. Comparison of Absorption of Sodium Sulfapyridine and Sulfanilamide in Equimolecular Doses

Rabbit no. 2486, male, weighing 2.6 kgm., received *per os* sodium sulfapyridine in the dose of 653.1 mgm. per kgm. A week later, sulfanilamide in the amount of 414.6 mgm. per kgm. was given by the same route. Blood concentrations were followed for 8 hours after each dose. Broken lines denote free forms, and the solid ones, sums of the free and conjugated forms. The results with sodium sulfapyridine are in circles, and those with sulfanilamide in triangles.

and the differential of leucocytes, were not sufficient to indicate abnormal changes on account of the drug. The blood concentration of sodium sulfapyridine in the two dogs receiving the smaller dose was, on the whole, negligible at the end of 18 hours after each dose, but that in the other two animals with the larger dose varied from 1.87 to 22.39 mgm. per 100 cc. The urinary levels of the sodium salt were consistently high.

All the dogs were sacrificed, and their visceral organs were examined grossly and microscopically. No pathological lesions were discovered.

ABSORPTION

By means of the method of Bratton and Marshall,[18] the course of sodium sulfapyridine in the blood stream could be easily followed. For example, in Figure 1, the curves obtained in a rabbit

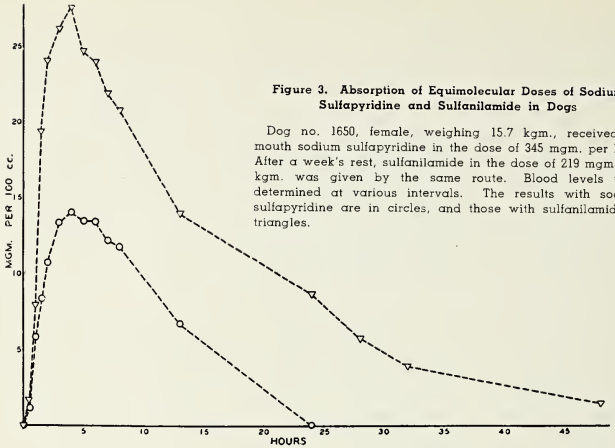


Figure 3. Absorption of Equimolecular Doses of Sodium Sulfapyridine and Sulfanilamide in Dogs

Dog no. 1650, female, weighing 15.7 kgm., received by mouth sodium sulfapyridine in the dose of 345 mgm. per kgm. After a week's rest, sulfanilamide in the dose of 219 mgm. per kgm. was given by the same route. Blood levels were determined at various intervals. The results with sodium sulfapyridine are in circles, and those with sulfanilamide in triangles.

by intravenous injection indicate clearly the high concentration of free sulfapyridine during the first hour, after which it fell rapidly with a corresponding increase in the acetylated form. When a larger dose was given by mouth to another animal, the free form was low and almost constant, but the conjugated form mounted consistently as illustrated in Figure 2. This is in contrast with sulfanilamide, which in an equimolecular dose, gave rise to a maximal blood concentration of the free form fully 9 times that of sodium sulfapyridine, while its acetylation proceeded to a much less extent. In other words, the rabbit is capable of acetylating sodium sulfapyridine more readily than sulfanilamide.

Unlike rabbits and men, dogs show no conjugation; that is, sodium sulfapyridine exists in free form throughout the body. In two animals, a dose of 200 mgm. per kgm. given by vein immediately produced a blood concentration of 30 and 28 mgm. per 100 cc., respectively. As shown in Figure 3, the sodium salt administered by mouth disappeared from the blood in about half the time required by an equimolecular dose of sulfanilamide. Compared with sulfapyridine, the sodium salt was more easily absorbed as judged by the higher blood concentration. All duplicate experiments on absorption in both rabbits and dogs confirmed the above statements.

SUMMARY

1. Solutions of sodium sulfapyridine are nonirritating to the rabbit's eye sac, but cause necrosis when injected subcutaneously or intramuscularly in animals. Intravenous injections without extravasation are not followed by tissue damages.

2. Sodium sulfapyridine given by mouth prolongs and saves the lives of mice infected with pneumococcus type I, streptococcus, meningococcus type III, and staphylococcus, in doses equal to about one-third of those of sulfapyridine. When injected intravenously, sodium sulfapyridine alone does not afford a maximal chemotherapeutic action in mice; it must be supplemented by oral administration of sulfapyridine.

3. The toxicity of sodium sulfapyridine has been determined in various species of animals by different methods of administration, and compared with that of its closely allied compounds. Being more soluble and more easily absorbed, sodium sulfapyridine is decidedly more toxic than the free "acid" sulfapyridine. It has practically the same toxicity as sodium sulfathiazole when injected intravenously in mice.

4. Dogs receiving oral doses of 0.25 to 0.5 gm. per kgm. daily for 24 days do not show loss of body weight, marked changes in erythrocytes and leucocytes, or persistent presence of abnormal ingredients in urine such as albumin and sugar. No pathological effects can be detected at the end of experimentation.

5. Sodium sulfapyridine is rapidly absorbed and eliminated. A high blood concentration of the drug in the free form is immediately established following intravenous injections, which cannot be easily attained by oral employment of either sulfapyridine or sodium sulfapyridine. The rate and extent of acetylation in rabbits are much greater with sodium sulfapyridine than with sulfanilamide, irrespective of the route of administration. There is a suggestion that sodium sulfapyridine is more quickly excreted than sulfanilamide.

[18] Bratton, A. C. and Marshall, E. K. Jr.: A new coupling component for sulfanilamide determination. *J. Biol. Chem.* **128**:537, 1939.

A STATISTICAL ANALYSIS OF 1700 SUDDEN AND VIOLENT DEATHS*

WALTER E. KRUSE, M.D.
FORT WAYNE

So far is is known, there has never been a paper or report presented which set forth the nature and various causes of sudden and violent deaths as they occurred in and around Fort Wayne. At first it was a personal desire to satisfy my own curiosity that led to the study and classification of cases that occurred during the first year of Dr. Raymond Berghoff's first term of office as coroner in 1932. It was my privilege, at that time, to have served as deputy coroner and as such it was my duty to conduct autopsies and assist in the investigation of sudden and unaccountable deaths. Therefore, there was a personal interest in these cases inasmuch as the autopsy findings frequently left an indelible impression. The results obtained warranted the continued study and classification in the following years.

In 1936 when it was my good fortune to inherit the office of coroner, I decided to continue from year to year to review the cases which came under my jurisdiction. In this report, therefore, the cases that occurred under Dr. Berghoff's administration as well as my own are combined and cover a period of eight years.

Interest may be aroused by a resumé of the work done in the coroner's office. Space does not permit a detailed report of all cases investigated nor is the necessity indicated. However, a few highlights may be entertaining and educational.

While the coroner's office is strictly a political office, decided by popular election, this community has been very fortunate in the past in its choice of coroners. As far back as memory serves, the office has been conducted by a physician, educationally qualified, so that throughout the years a high standard has been maintained without violating the dignity of the medical profession.

Historically, the office of coroner was instituted as far back as the twelfth century by the King of England. He appointed a man as his personal representative and investigator of all sudden deaths, accidents, suicides, and murders in addition to performing a number of other duties. In the early history of our country, the necessity for the coroner's office was realized and so through the centuries this office has endured. It is listed in this state as one of the minor constitutional offices, although stripped of many of its original duties except the very important one of investigating sudden, violent and accidental deaths. Responsibility is placed on this office in the detection of crime often hooded under the cloak of a natural death. In this day and age when murder is considered a business and a means of livelihood for some people, one dares not become lax in his investigations on the presumption that murder cannot happen in this or any other locality.

Most people regard the expectation of death as a matter of fact especially if it is preceded by a lingering illness or an invalidating accident. However, if death should come suddenly or unexpectedly to a person who is apparently considered to be enjoying the best of health, the public is stunned by the news. Newspapers are apt to give front page publicity to a sudden death even though the individual may not be well known.

Nowhere is the opportunity greater for the study of the causes of sudden death than in the coroner's office; there one may gather a wealth of information. Certainly, there is no scarcity of material and opportunity if one cares to take advantage of it. It is, therefore, altogether proper and fitting that a statistical analysis be made of the cases that were investigated by Dr. Berghoff and myself during the past eight years. They represent suicidal tragedies, unavoidable accidents, wilfull murders and, for lack of a better term, acts of God.

Some cases are very simple; others frequently tax one's diagnostic ingenuity. As a rule, a cause of death can be demonstrated at the autopsy table, but occasionally it becomes impossible to find sufficient pathology to account for sudden death. One may find a number of minor pathological discrepancies not sufficient to be a justifiable cause of death. This has been verified by recognized pathologists in 2% to 4%, especially in some cases of angina pectoris. We now know that sometimes coronary disease occurs without producing any characteristic pain. On the other hand, severity of substernal pain should not be considered a criterion of involvement of coronary damage. In the presence of a large myocardial infarct, one patient may succumb slowly of myocardial failure while another patient may die suddenly and reveal only a minute infarct at the autopsy table.

INCIDENCE

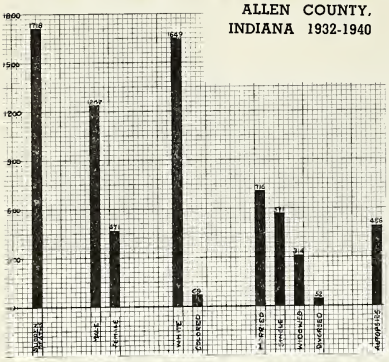
Beginning with January 1, 1932, and ending December 31, 1939, a total of 1,718 deaths were investigated. This is an average of one death every 40 hours. The greatest catastrophe encountered occurred on January 24, 1936, when twelve members of one family riding in an automobile were killed when struck by a train. The longest period in which no deaths occurred was eighteen days.

SEX

Males outnumbered females by 1,247 to 471 or slightly less than 3 to 1. At first glance this disproportion may not sound logical or may seem exaggerated, but if we analyze these deaths and place each in its respective and proper grouping,

* Presented before the Fort Wayne Academy of Medicine and Surgery, Fort Wayne, April 9, 1940.

STATISTICAL ANALYSIS OF SUDDEN DEATHS
ALLEN COUNTY,
INDIANA 1932-1940



we shall see that in no group do females outnumber the males, and furthermore the ratio of males to females is surprisingly constant. As a rule men pursue a more hazardous occupation than do women, making them more liable to accidents. Men suffer more often from heart disease than women and especially is this true in cases of coronary disease. Men lack patience, temperament, and the ability to bear pain that women do and, therefore, resort more frequently to suicide. Women seem to be able to hold up better after adversity strikes than do men, for it seems much easier for women to readjust themselves to new conditions and environments. From my statistics and observations, I seriously doubt the wisdom of the statement referring to women as the weaker sex.

COLOR

Locally, among the living, the ratio of white people to colored is estimated to be about 50 to 1. Proportionately, however, we find sudden and violent deaths more frequent in the colored race. Of 1,718 deaths, there occurred among the colored population 69 which in terms of ratio would roughly be about 25 to 1. This gain is made up in three groups of causes of death, namely in homicides, pulmonary tuberculosis, and luetic heart disease. While it may be purely coincidental, it is interesting to note that there was not a single case of suicide among the colored race, certainly a tribute to their happy-go-lucky mode of living.

MARITAL STATUS

Since the majority of deaths occurred after the age of 40, it is natural to expect that two out of every three were at some time or other married. At the time of death, we find that 571 were single and had never been married. The largest group comprising 761 were married, 314 were widowed, and 52 had been divorced. The status in 20 was undetermined.

AUTOPSIES

There were 486 autopsies performed on the 1,718 deaths. It is true that in many sudden deaths the cause is grossly apparent and does not require an autopsy to establish the cause of death. There is no justification for insisting upon autopsies in deaths resulting from automobile accidents or suicides unless there is some specific basis for it. While the law favors the coroner in his privilege of ordering an autopsy performed when deemed necessary, yet the privilege should not be abused to the extent of incurring the ill will of the public if it can be safely avoided. It is no secret that autopsies are not always popular with embalmers who sometimes advise the family against an autopsy because of the interference with the circulation. The prejudice of the public against autopsies can frequently be minimized by tactful explanation of the advantage to other members of the family through knowledge of the presence or absence of certain hereditary diseases.

In certain cases of sudden death, a clue to the diagnosis may be had by contacting the family physician who may have treated the victim for some ailment which eventually resulted in his death, barring, of course, foul play. Another group of cases presents itself in which there is no available history of previous illness, and these by all means should have the benefit of post mortem examination. They are by far the most interesting since no one knows where the diagnostic trail may lead. Before the autopsy begins, the tendency is to follow a hunch and make some bizarre guess at a diagnosis only to be proved wrong more often than right when the death certificate is signed.

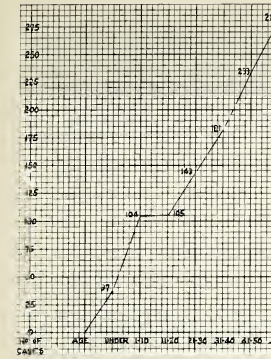
The indictment that too few cranial autopsies are performed is not justified unless we fail to find sufficient pathology in the chest or abdomen to account for the cause of death. In foreign countries, where socialized medicine is practised, it is comparatively easier to do cranial autopsies as a routine examination than in this country. However, I feel that we still do a sufficient number to warrant their continuation on the present scale.

The autopsies are, of course, performed by the coroner's physician who writes a detailed report on each case. For cases requiring chemical analysis, or further laboratory work, a competent laboratory is available, which is paid out of a special fund for this purpose.

AGES IN DECADES OF ALL DEATHS

A statistical survey was made of the various decades in which sudden death occurred. Under the age of 1 year, there occurred 37 deaths most of which were attributable to congenital defects, status thymolympaticus, bronchopneumonia, etc. In each of the first two decades of life, the number of deaths were practically the same, 104 and 105 respectively. These include a variety of causes both natural and accidental as well as a half dozen suicides by hanging when such a wave among high school students swept over our country. The third decade marks the beginning of a gradual but progressive increase in the number of deaths with 143, chiefly from automobile and railroad accidents.

AGE GROUPS OF ALL CASES



In the 31 to 40 age group, there were 181 deaths and the number of heart deaths begins to loom as the most important cause of death.

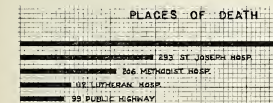
Ascending the graphic ladder, there were 233 deaths in the fifth decade, heart disease leading by a substantial margin. In the sixth decade, 280 people came to their death and in the seventh decade the peak was reached with 285 deaths. In addition to heart deaths, there were a number of deaths due to accidental falls and their terminal processes as pneumonia and embolism. From 71 to 80, we found 233 deaths followed by a marked decline in the ninth decade with 63 deaths. After the age of 90, there were only 7 deaths.

Roughly speaking, ⅔ of all deaths occurred after the age of 40, consistent with the statistical fact that the span of life has been prolonged to somewhere around the age of 60 years.

PLACE OF DEATH

Where do most sudden deaths occur? The question may not bear much scientific significance, yet it is interesting to recount places where one has been called to investigate these deaths. Almost half of all deaths, 751, occurred in or near the home.

PLACES OF DEATH



CLASSIFICATION OF DEATHS

CAUSES OF DEATH	CASES	%
SUICIDES	187	10.8
HOMICIDES	40	2.3
AUTOMOBILE ACCIDENTS	336	19.5
MISCELLANEOUS ACCIDENTS	286	16.6
CARDIAC DEATHS	556	32.3
NATURAL DEATHS	313	18.2
TOTAL	1718	100.0

The majority of these people were either found dead in bed, dropped over dead from heart disease, or committed suicide at home or in the garage. A total of 611 people died in the three major hospitals or enroute, to be pronounced dead on arrival. The public highways claimed 99 victims, practically all due to automobile accidents. Railroad accidents caused 58 instant deaths; rivers took 55. There were 43 who died in their shoes in various industrial buildings and factories. Sudden death occurred 41 times in public buildings including 4 deaths in churches. We were called to investigate 37 deaths in county and state institutions. Eight deaths took place in doctors' offices, several occurring during anesthetics. From this we learn that death is not particular as to the place of its rendezvous.

CLASSIFICATION OF DEATHS

Without benefit of guidance by precedence, we were compelled to devise our own classification and grouping of deaths, into one of which each of the 1,718 sudden deaths fell. The first class comprises the suicides or those with suicidal intent who may have died from some intercurrent disease (such as pneumonia) following the drinking of several ounces of bromides or barbiturates. In this group, there were 187 suicides or 10.8% of all cases of sudden deaths. This averages about 2 suicides a month, and corresponds closely to the government's vital statistics for suicides.

The second group includes 40 homicides committed in 8 years, or 2.3% of all sudden and violent deaths.

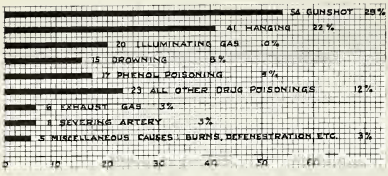
The list of casualties naturally includes automobile accidents, the third group in which 336 deaths occurred, or 19.5% of all deaths. Every fifth death encountered was attributed to the automobile.

The number of general and miscellaneous accidents was 286, or 16.6% of all sudden deaths.

So far, the number of deaths classified have, for the sake of simplicity, been due to violence in one form or another. The remaining deaths, though sudden, should be thought of as being due to natural causes.

One large group we shall term "cardiac deaths," of which there were 556 or a percentage of 32.3, about one out of every three of all sudden deaths. Into the last group is placed all other deaths attributed to a variety of natural causes. In this group there were 313 deaths, or 18.2%.

SUICIDES 187



In glancing over this list, one cannot help but be impressed by the fact that automobile accidents and cardiac deaths accounted for over 50% of all sudden deaths. How we can more equitably distribute these deaths among other groups and thus prolong life is a challenge to the medical profession as well as to society in general. The average span has been lengthened, but it seems that too many lives are needlessly sacrificed by accidents and cardiac deaths which might have been prolonged by proper examination and earlier treatment of the failing heart.

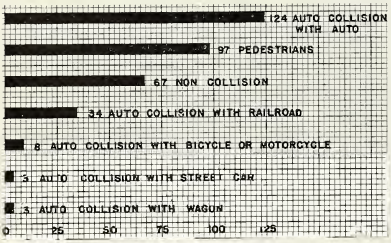
SUICIDES

Among the tragedies of life, there is no greater one than that of suicide. In dealing with these cases, one can feel only compassion for the victim himself, and a genuine sympathy for the surviving relatives who to some extent feel stigmatized by such acts. During the past eight years, 187 people have voluntarily ended their lives. Of these 145 were males and 42 were females, a ratio of more than 3 to 1. In 54 cases a gun was used to accomplish the purpose. Hanging or strangulation accounted for 41 deaths. In third place was illuminating gas with 20 victims. Phenol poisoning ranked fourth with 17 cases. Next came drowning with 15. A group of 23 used various miscellaneous drugs such as potassium cyanide, bichloride of mercury, strychnine, phosphorus, muriatic acid, nembutal and bromides. Slashing of the throat and severing arteries occurred in 6 instances.

In the November 27, 1939, issue of *Life* Magazine, an article appeared on the office of the medical examiner of New York, who reported an incidence of 110 suicides a month, or about 1,320 during the year 1938. Of all these cases, one-third were caused by illuminating gas, 20% by hanging, 16% by jumping from windows or fire escapes, 12% by shooting, 11% by poison and 8% by slashing.

Either the writing of suicide notes is becoming a lost art or more suicides are committed on the spur of the moment, for the finding of a suicide note is not as common as it formerly was. The publishing of suicide notes in newspapers is to be condemned in order to spare the family further humility.

AUTOMOBILE ACCIDENTS 336



HOMICIDES

During the past eight years, there occurred in this community 40 homicides or an average of five a year. Again males outranked females 32 to 8. Shooting brought death to 21 persons. Blunt tools were used in 7 cases, and 6 people died from knife or stab wounds. Two children succumbed to the effects of illuminating gas turned on by their mother. Two deaths resulted from strangulation and two were given lethal doses of arsenic and potassium cyanide.

AUTOMOBILE ACCIDENTS

During the past 8 years, 336 persons lost their lives through automobile accidents. Of this number, 124 deaths occurred from collisions involving two or more automobiles. There were 97 people killed while crossing the streets or walking along the highway. In accidents involving only one automobile which either upset or skidded into a tree or telephone post, 67 people came to their death. The railroad crossings claimed 34 deaths of automobile passengers. Eight people riding on bicycles or motorcycles died as the result of collision with automobiles. Wagons and street cars colliding with automobiles each caused 3 deaths.

The conjecture arises as to how many, if any, of the 336 persons could have been saved by proper handling and judicious treatment? Frequently, real insult is added to severe injury in cases of fractures by well-meaning motorists who load up the victims in their cars and rush them to the nearest hospitals, thereby hoping to save a lot of time. Thus simple fractures may become compound and the shock is more pronounced than that resulting from the original accident. Only a month ago, a pedestrian was struck by an automobile at an alleged speed of 20 to 25 miles per hour. The motorist himself brought the man to the hospital, a distance of 8 blocks. In the emergency room the victim was brought in pulseless and in great shock, from which he died in less than two hours. He had suffered compound comminuted fractures of the right tibia and fibula, fractures of the left tibia and fibula, right radius and ulna, and fractured ribs. Yet this man was loaded in a seated position in the car and taken to the hospital.

First aid treatment of hemorrhage, fractures and shock will often determine the eventual outcome, and therefore careful management in the transportation of patients to hospitals cannot be overemphasized.

ACCIDENTS 286

	HAMMAN	ALLEN COCASES	
TOTAL NUMBER OF CASES	700	869	
1 DISEASES OF HEART & AORTA	72%	63%	550
DISEASES OF CORONARY ARTERIES	40%	39%	338
VALVULAR DISEASES	12%	6%	54
MYOCARDIAL DISEASES	8%	18%	162
DISEASES OF AORTA (ANEURYSM)	12%	2.2%	22
2 DISEASES OF LUNG	10%	10%	86
3 DISEASES OF BRAIN	8%	10%	86
4 MISCELLANEOUS ALL OTHER CAUSES	10%	17%	141

① HAMMAN, L. BULLETIN JOHNS HOPKINS HOSP 55 - 387 - 1934

GENERAL ACCIDENTS

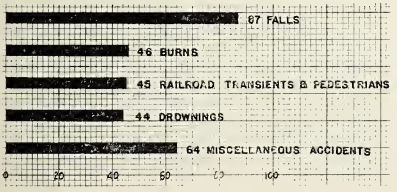
There were 286 genuine accidental deaths. These include every conceivable type of an accident, the chief offender being falls which resulted in 87 deaths. These included all types of falls as from a ladder, stairway, scaffold, or roof, and those falls resulting from slipping on ice, stumbling over a rug causing fracture of skull or hip with terminal pneumonia or embolism. Accidental burns claimed the lives of 46 people and 45 were ground to their death on rails. Forty-four people came to their death by drowning, while 64 died in various miscellaneous accidents.

IMPORTANT NATURAL CAUSES OF DEATH

This phase should be of genuine interest to the medical profession. This embodies a comparison of 869 sudden natural deaths in Allen County with a group of 700 similar cases collected and reported by Hamman of Johns Hopkins. At the very beginning let me explain that the location with its particular prevalence for some diseases influences certain groups. The color as well as the class of patients encountered frequently makes a difference. In a locality thickly populated by colored people, the incidence of aortic disease and luetic aneurysm might be higher than a place inhabited only by white people. Likewise one might expect to find more evidence of rheumatic heart disease in the slum districts as a result of the ill-nourished, ill-housed, and ill-clad people found there.

Hamman reports 72% of diseases affecting the heart and aorta contrasted to 63% in our series. In both reports, coronary disease had about the same prevalence with 40%. Incidentally, in 1,000 heart cases in New York, Wykoff and Lingg reported 40% due to coronary disease. Long and Brunn of New York state that 91% of sudden deaths are due to diseases of the cardiovascular system and 65% of these are due to disorders of the coronary arteries. This stamps coronary disease as an outstanding cause of sudden death.

IMPORTANT NATURAL CAUSES OF SUDDEN DEATH AND THEIR PERCENTAGE INCIDENCE



Further comparison of our series with Hamman's report reveals a wider variation in other cardiac cases. In valvular diseases, there is a difference of 8%, in myocardial diseases, 10%, and aortic disease about 10%. In diseases of lungs and brain, there is very little difference in the two reports. In the miscellaneous group, there is a variation of 7%.

CORONARY DISEASE

The outstanding cause in our series of sudden deaths was coronary disease, of which there were 338 cases or 39% of all natural deaths. This disease predominates in the male sex in the ratio of about 5 to 1, or to be exact 269 males to 69 females. It occurs most prominently in the latter decades of life, frequently in the prime of life, rarely in adolescence. The youngest to succumb was 28 years old, the oldest 89, while the average coronary death was 62.5. Whether the morbidity of coronary disease is actually increasing, or the diagnosis is more often established by electrocardiogram or post mortem, the fact remains that we are more coronary minded.

The high incidence of coronary disease invites a brief review of the etiological and pathological factors involved. The three most important causes are rheumatic, luetic, and hypertensive diseases. Thus the age of onset is significant. Under 20, the most common type is credited to rheumatic disease. Between 20 and 35 is the syphilitic age, and after 40 one graduates into the arteriosclerotic or hypertensive type. Other contributory factors which are thought to influence coronary disease are metabolic disorders, infections, endocrinopathies, and heredity.

Pathologically, coronary occlusion can be brought about by the formation of thrombosis or embolism. In the former, a clot becomes superimposed upon the wall of a diseased artery, thereby shutting off the blood supply to the myocardium. In embolism, there may be a detached piece of thrombus from the left auricle or from a large vein, or a piece of valvular vegetation, or a large atheromatous plaque or a fat or tumor cell. When an artery is thus occluded, the blood supply to the sector of muscle nourished is cut off, forming an infarct. When an artery is partially occluded by a plaque, it will not only reduce the amount of blood flowing through the vessel, but it will also lower the blood pressure and cause a progressive stenosis and finally thrombus formation over the ulcerated areas at the site of the atheromatous constriction. Thrombosis is most frequently found in the descending branch of the left coronary artery, which supplies the left ventricular wall near the apex as well as part of the interventricular septum.

Such a blockade produces apical infarcts followed by necrosis and frequently results in death.

If 60% of our 556 sudden natural deaths have been due to coronary disease, what can we, as physicians, do to reduce this figure? We must impress upon our patients the importance of regular routine physical examinations; we must avail ourselves of a careful history and adequate laboratory procedures including, when necessary, serial electrocardiograms made annually by a physician competent in their interpretation. After all, coronary disease is the tragic sequel to a failing heart, one which has been in the process of failing for many years during middle life. If we can elicit any prodromal warnings during this developmental period before the myocardium becomes irreparably damaged by the diminution in the coronary circulation, we have at least made a step in the right direction.

Frequently, serial electrocardiograms will indicate changes in the coronary blood vessels before clinical evidence becomes manifest and should, therefore, be encouraged as a diagnostic laboratory aid. However, it is also true that about 25% of all cases of angina pectoris show a normal electrocardiogram. It is important, therefore, that we correlate the history and physical findings with electrocardiographic evidence instead of placing too much reliance exclusively on the electrocardiogram for our diagnosis and prognosis.

VALVULAR DISEASES

A total of 34 cases of valvular heart disease was recorded among the sudden natural deaths. These were the equivalent of 4% as compared to Hamman's figures of 12%. Our cases included 14 of mitral stenosis, 10 cases of mitral regurgitation, 9 cases of chronic and subacute endocarditis, and 1 case of aortic stenosis. These diagnoses were not all obtained by autopsy but were frequently supplied by family physicians who had previously treated them.

The diagnosis of valvular disease is much easier made by the aid of the stethoscope and a good history than in many other cardiac conditions. Murmurs are sometimes discovered during routine physical examinations and can be treated. They are, therefore, not expected to remain untreated and patients are more apt to die during treatment than to fall in the hands of the coroner's physician following a sudden or unexpected death.

MYOCARDIAL DISEASES

Under this grouping, there occurred 162 cases or 18%. At the risk of drawing fire from certain cardiologists for using the term "myocarditis," we shall proceed to analyse this group. There were 93 cases of chronic and 3 of acute myocarditis. Acute cardiac dilatation was found 36 times. In this group, we also place 14 cases that were best described as cardio-vascular-renal disease. Five cases of ruptured right ventricle and three cases of ruptured left ventricle were found at autopsy.

Sometimes difficulty arose in regard to the proper terminology and classification of these diseases. In myocardial infarcts without much coronary involvement, it occasionally seemed doubtful as to whether it was predominantly coronary or myocardial. This would explain wide discrepancies when compared to Hamman's figures.

The term myocarditis has largely been supplanted in recent years by one of more accurate description, as acute heart failure, or in the more chronic form "chronic myocardial insufficiency." In reality, the term myocarditis should be used advisedly and restricted to those conditions of the myocardium resulting from such acute infectious diseases as septic sore throat, diphtheria, rheumatic fever and typhoid fever.

LUETIC AORTITIS AND ANEURYSM

Referring to Hamman's statistics, we find 84 cases or 12% attributable to syphilis of the aorta or aneurysm. In our own series, there were but 22 cases or 2.2%. Clawson and Bell in Minnesota report an incidence of 2.6%. These lower percentages in the Middle West do not permit us to draw any medical halos around our heads, for as previously stated there are many local conditions which influence the incidence of syphilis including the accuracy of diagnosis and case finding. It is hoped that the acquaintance of the public with syphilis by compulsory syphilis exclusion, blood tests of food handlers, and prospective married couples will lead to early recognition of the disease, more adequate treatment, and a corresponding reduction of fatal sequellae.

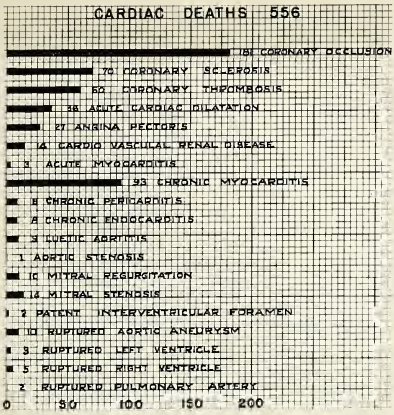
PULMONARY DISEASE

According to our statistics, 84 deaths or 10% of all deaths from natural causes were attributable to pulmonary involvement. Lobar pneumonia with 26 and bronchopneumonia with 24 deaths led the field of pulmonary diseases. Seventeen people died from tuberculosis, most of them being found dead after a massive hemorrhage or dying under the faith of Christian Science. We found 7 cases of pulmonary embolism and 2 of thrombosis. There were 6 cases of pulmonary edema and one each of empyema and emphysema.

The incidence of pulmonary disease in sudden death is frequently considered negligible, especially by the laity. However, our figures correspond with those of Hamman's and must, therefore, be reckoned with occasionally as a possible cause of sudden death.

DISEASES OF THE BRAIN

Many years ago, most sudden deaths occurring in older people were said to be due to "stroke of apoplexy." We are now inclined to believe such cases were exaggerated in numbers. Our statistics, today, show a total of 88 cases or 10% attributable to some cerebral disturbance. Of these, 70 cases were signed out as cerebral apoplexy, 9 were due to epilepsy, 3 to cerebral embolism, and 3 to brain tumors. We found 2 cases of brain abscess and one



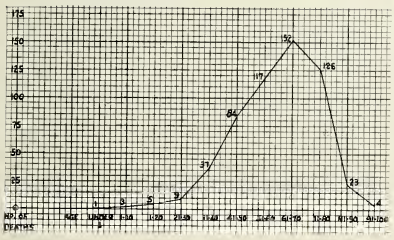
case of severe cerebral concussion of unknown etiology.

By way of comparison to our series of 10%, Hamman reports 8%. Just how these cases are further subdivided is not stated.

CARDIAC DEATHS

When a layman refers to the sudden death of a friend he may say: "Jones died this morning of a heart attack." To him it does not matter to be more explicit in his diagnosis; suffice it to say that Jones is dead from a heart attack. The medical profession, however, recognizes the underlying pathology of heart disease upon which it bases its diagnosis. An itemized list of cardiac deaths is presented as they occurred in 556 cases. Coronary occlusion occurred in 181 cases, coronary sclerosis in 70, and coronary thrombosis in 60 cases. Acute cardiac dilatation was found 36 times and angina pectoris 27 times. There were 14 cases of cardiovascular renal disease. Acute and chronic myocarditis accounted for 3 and 93 deaths respectively. Eight cases each of pericarditis and endocarditis were recorded. Nine deaths resulted from luetic aortitis and one from aortic stenosis. Continuing with valvular diseases, mitral regurgitation and mitral stenosis added 24 deaths. Two cases of developmental defects were found at autopsy. The last group includes the massive hemorrhages occurring from rupture of the ventricle or arterial wall. Of these, 10 were from aortic aneurysm, 3 from the left ventricle, 5 from the right ventricle, and 2 from the pulmonary artery.

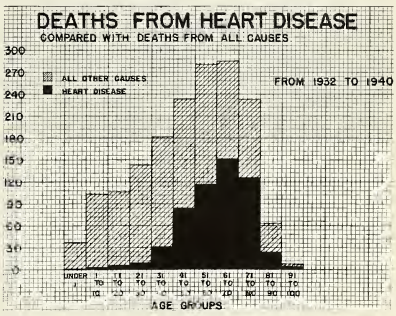
DEATHS FROM HEART DISEASE
By Age Groups From 1932 to 1940



DEATH FROM HEART DISEASE BY AGE GROUPS

Of more than passing interest is an attempt to classify cardiac deaths into age groups as they occurred from 1932 to 1940. Only one death was recorded under the age of 1 year, 3 deaths in the first decade, 5 in the second and 9 in the third decade. Up to the age of thirty, we have a total of 18 deaths due to heart disease, a relatively small number. The fourth decade with 37 deaths doubles the 18 in the first three decades. The fifth decade with 84 deaths more than doubles its predecessor. In the sixth decade, there were 117 cardiac casualties, whereas the seventh decade produced 152 deaths, the topmost figure. There were 126 deaths in the eighth decade followed by a rapid decline in the last two decades.

A study of the preceding figures will offer an interesting observation and that is that 500 out of 556 deaths, or to simplify matters, 10 out of every 11, occurred after the age of 40 years. This is indeed a more favorable condition than would have existed fifty years ago. It is probable that at that time, they would have been victims of dysentery during infancy, or diphtheria during childhood, or tuberculosis or typhoid fever in adult life. Today, they die as the result of rheumatic, luetic, or hypertensive heart disease at an average age of around 60 years. Such are the virtues of medicine.



DEATHS FROM HEART DISEASE COMPARED WITH DEATH FROM ALL CAUSES IN AGE GROUPS

If one superimposes the number of deaths by age groups of all causes upon the number of deaths caused by heart disease, there will be observed a difference in the ratio with regard to certain age groups. Under the age of one year, there were 37 deaths from all causes as compared to one cardiac

death. In the first decade, the ratio was 104 to 3, in the second decade 105 to 5. Between the ages of 21 to 30, there were 143 deaths from all causes compared to 9 cardiac deaths. In the fourth decade there were 181 deaths of which 37 were due to heart disease. The odds here begin to shorten to about 5 to 1. The fifth decade shows a ratio of 233 to 84 or about 3 to 1. As we reach the next age group between 51 and 60, the ratio narrows to about 2½ to 1 or, to be exact, 280 to 117. In the seventh decade, the comparative figures are 285 to 152 or even less than 2 to 1. Of 233 people who died between the ages of 71 and 80, there were 126 due to heart disease, a still fairly consistent ratio with its previous age group. In the ninth decade, the ratio was 63 to 23 and in the tenth and last decade 7 to 4.

It was previously stated that, up to the age of 40, heart trouble had caused the deaths of 55 people out of a total of 556 or about 1 to 10. If we likewise total the deaths occurring in the first four decades, the result is 570 deaths out of a possible 1,718 or roughly 1 to 3. In other words, if one has been fortunate enough to survive a fatal accident up to the age of 40, he is almost as likely to succumb to some cardiac disturbance as to all other causes combined.

MISCELLANEOUS NATURAL DEATHS

On a great number of occasions, the coroner's office was called to investigate deaths that had occurred after a period of illness during which no physician had been called in attendance. Most of these cases involved two groups of people: first, those whose religious belief conflicted with rational medical care and, second, a considerable number of people who failed to realize the critical stage of the victim's illness before deciding to call a physician. This was especially true in the lower class of people and those in the rural areas who resorted to home remedies and the treatment of procrastination. This serves to explain the diagnosis of many cases that otherwise might have been signed out by the family physician.

In this miscellaneous group there were 141 cases, which will be itemized. Heat prostration caused 12 deaths, and exposure to freezing temperature, 3 deaths. Alcoholism was responsible for 20 deaths, mostly of the radiator variety of alcohol and before the days of legalization. There were 5 cases of ruptured gastric ulcer and an equal number of acute gastroenteritis of unknown etiology. Intestinal obstruction was found to be the cause of death in 7 cases. Acute yellow atrophy and mesenteric thrombosis each contributed 3 cases to this bizarre group. Four people died in diabetic coma upon arrival at the hospital.

Among infants, 12 died of status thymolymphaticus, 3 of marasmus, 2 of inanition fever, 2 of pyloric stenosis, and 1 of intussusception. Seven premature infants were found along river banks and infrequently used roadsides.

There were 2 cases each of hepatic embolism and acute pancreatitis. Criminal abortions took a toll of 5 deaths and one death resulted following spontaneous rupture of a pregnant uterus at term. One case was reported of pelvic peritonitis following a suspected but unproved abortion. One case of asphyxia occurred following aspiration of food. In 5 cases, the diagnosis of "chronic nephritis" was submitted by the family physician, and one of "essential hypertension." Indeed fortunate were we to have had one case of bilateral cystic degeneration of adrenal glands which came to autopsy, verily worth driving ten miles at three o'clock in the morning to see.

There was one case each of acute gangrenous appendicitis, paralytic ileus, and acute gangrenous cholecystitis. Furthermore, two cases of acute gastric dilatation occurred in our series. The otolaryngologist who reads this paper might be interested in knowing that his specialty was well represented in our series by one death each from edema of the glottis, streptococcic tonsillitis, edema of the larynx, and diphtheria.

Visceral syphilis was found in 2 cases. One death resulted from pernicious anemia and 3 from senility. Septicemia following infected abrasions was found on 3 occasions. Strange as it may seem, 14 people died of malignancy, 1 a case of generalized sarcomatosis, in which no area of two square inches did not contain a sarcomatous nodule. The remaining malignancies were thus distributed: carcinoma of rectum, 2; uterus, 2; stomach, 2; one each of breast, cheek, thyroid, testis, prostate, lung, and pancreas.

There was one case of pernicious anemia and one case of nephritic abscess which concluded our series.

The variety of diagnoses should serve to emphasize the necessity of having a qualified physician with a broad scope for pathology to conduct the office of coroner.

SUMMARY

1. The causes of 1,718 sudden, violent, and accidental deaths in Allen County, Indiana, during an eight year period from 1932 to 1939, inclusive, were studied and analyzed.

2. More than half of all deaths investigated (892) were due to automobile accidents and cardiac deaths.

3. Of 869 sudden deaths due to natural causes, 556 were found to be due to diseases of the heart and aorta, a percentage of 63.

4. Of 556 cardiac deaths, there were 338 or 39% due to diseases of coronary arteries at an average age of 62.5 at the time of death.

5. It was noted that 500 out of 556 sudden cardiac deaths occurred after the age of 40. In other words, 10 out of 11 survive the age of 40, when "life is said to begin."

512 WAYNE PHARMACAL BUILDING.

PROGRAM FOR ANNUAL SESSION AT FRENCH LICK—PAGE 530

ACUTE PERFORATIVE APPENDICITIS

MELL B. WELBORN, M.D.
EVANSVILLE

The highest mortality rate in acute appendicitis occurs in that group of patients with perforations of the acutely inflamed appendix. It is unfortunate that no entirely satisfactory preventive for this occurrence has been evolved, and until this is done the treatment of acute perforative appendicitis will occupy an important part of the general surgeon's time. Educational programs in effect in many cities have encouraged patients with abdominal pain to see their physicians and not to take laxatives. These programs will eventually, no doubt, reduce the incidence of perforation and its attendant serious complications. Be that as it may, it would seem that a review of one's results obtained in the treatment of this disease might offer valuable clues to its future management.

The material for this study was obtained from the case histories of those patients with acute perforative appendicitis admitted to Welborn-Walker hospital during the five-year period from January 1, 1935, through December 31, 1939. The overwhelming majority of these patients were treated by four surgeons, and familiarity with their methods made classification easier than it otherwise might have been. Even so, the division of acute appendices into ruptured and unruptured groups, localized and generalized peritonitis, etc., was not easy, particularly if exposure had been obtained through a small McBurney incision.

In this paper the term *acute perforative appendicitis* is used to designate an acute appendix with a gross rupture or an abscess, or one with which there is free pus in the peritoneal cavity. Some designate the latter type as an acute appendix with a protective exudate, and others take it to indicate definite peritoneal invasion. That we have not been too liberal with the use of this term will be indicated, we feel, by our statistics to be reported later on in this review.

Most of the patients included in this study were from rural areas and the majority of them were private cases. We did not attempt to study the effect on the mortality of age, sex, race, or time of onset until time of operation. These factors have been thoroughly studied by Reid,[1] Maes,[2] Hudson,[3] and others,[4] and it was felt that since rather general agreement about them had been reached, their inclusion would be somewhat superfluous.

Table 1 lists the yearly incidence of acute perforative appendicitis and the total mortality occurring during the five-year period studied. Thus it will be seen that there was a total of 116 patients and 11 deaths. Of this number, 114 were subjected to "immediate" operation, one was not operated because of a mistake in diagnosis, and the other because he was moribund when first seen, and died about twelve hours after admission. The cause of death in these two patients was verified by autopsy, a ruptured appendix with generalized peritonitis being found in each instance.

Table 1—Acute Perforative Appendicitis

Year	*Number of Cases*	*Deaths**
1935	17	1
1936	29	2
1937	14	2
1938	17	0
1939	39	6
Totals	116	11

** Two deaths nonoperative. Diagnosis of appendicitis made at autopsy.*

Table 2 lists the total number of patients operated for acute appendicitis, ruptured and unruptured, and the percentage of mortality for each group during the five-year period under study. All patients with acute appendicitis, as noted above, were subjected to immediate operations except two. Among the 910 acute unruptured cases there were 15 deaths, or an operative mortality of 1.6 per cent. In the perforative group there were 114 operative cases with 9 deaths, a 7.8 percentage operative mortality. For the two groups totaling 1,024 acute cases, the mortality was 2.3 per cent for the five-year period.

We felt that it would be interesting to know the average number of days of hospitalization in the perforated cases, and found that it was 18.8 days. This represents little difference from a group of similar cases reported by Reid,[1] the average number of hospital days being 21.2 days in his series.

Any comparison of mortality rates with that of others is made difficult by a lack of uniformity in

Table 2—Mortality

Pathological condition	*Number of cases operated**	*Number of deaths*	*Operative mortality %*
Acute unruptured	910	15	1.6
Acute perforative	114	9	7.8
Totals	1024	24	2.3

** All acute unruptured cases operated.*

[1] Reid, Mont R., and Montanus, William P.: Appendicitis, *J.A.M.A.* **114**:1307 (Apr. 6) 1940.

[2] Maes, Urban., and McFetridge, Eliz. M.: The Mortality of acute appendicitis. *N. Y. State Med. J.* **38**:1 (Sept. 15) 1938.

[3] Hudson, Henry W., and Chamberlain, John W: Acute appendicitis in childhood. *J. of Pediat.* **15**:408 (Sept.) 1939.

[4] Pattison, Arthur C.: Factors in the mortality of acute appendicitis. *Am. J. of Surg.* **103**:362 (Mar.) 1936.

the classification of the various types of cases. What one might term a peritonitis from a ruptured appendix, another observer might not so designate. In our series of 1,024 acute operative cases there were 114 cases meeting the standards of our definition of this condition as previously herein outlined. The incidence of perforation in the 1,024 acute cases was found to be 11 per cent as compared to that of 36.7 per cent in 921 acute cases reported by Reid and Montanus[1] at the Cincinnati General Hospital. These authors found a total mortality rate of 4.86 per cent which was divided as follows: 1.03 per cent in acute unruptured appendicitis, 17.22 per cent in peritonitis, 10.08 per cent in appendiceal abscess, and 0.431 per cent in chronic and interval appendicitis. Pattison,[4] at the University Hospital, Iowa City, reported a mortality of 18.3 per cent in perforative appendicitis. He has obtained better results since adopting the use of a McBurney incision. Horsley[5] has obtained splendid results and reports a mortality of 0.617 per cent in a series of 972 cases of all types of acute appendicitis.

The treatment used in these cases consisted primarily of immediate operation through a McBurney incision with appendectomy and drainage. Of the 114 patients operated, no note was made on the record as to drainage in 4 cases. All of the remainder, except two, had some type of intraperitoneal drain inserted. This usually consisted of one rubber tube wick drain placed at the site of the appendix. There is no doubt but that drainage probably was used too frequently, but it is difficult for one to forget an old habit. It should be noted, however, that multiple drains were infrequently used, the tube was shortened rapidly, and usually was removed by the fourth or fifth day. Only one pelvic abscess requiring drainage occurred, although several patients showed signs of what was thought to be an early abscess, resolution occurring without operative intervention.

Appendectomy was performed in all but four of the 114 operative cases. One of the four died from generalized peritonitis, two did not return for observation, and the fourth had an appendectomy at Louisville, Kentucky, eight months after the original drainage. His case was interesting in that an abscess had dissected along the sac of an inguinal hernia, presenting the appearance of a strangulation.

A McBurney incision was used for exposure in all but 17 of the 114 cases. A right rectus incision was used 11 times, a lower midline incision five times, and an inguinal incision was used twice. These incisions were resorted to when there was some doubt as to the diagnosis or when the operator suspected the appendix of lying in an abnormal position. We are convinced that the McBurney incision is the one of choice and were a little surprised to find that it had not been used in a higher percentage of cases. A technical point aiding exposure when using this incision is to extend it for a short distance into the tendonous portion of the internal oblique, thereby exposing the lateral edge of the rectus muscle.

The term *immediate* or *prompt operation*, as we have used it, does not necessarily mean that these patients were operated upon within an hour or two after admission, but rather that they were operated upon as soon as possible after definitely establishing the diagnosis and correcting any concomitant condition such as dehydration. The proponents of delayed operation for perforative appendicitis have criticized the advocates of immediate operation on this score, but it seems that most writers have used the term "immediate" with some reservations as herein noted.

In reviewing the nine operative deaths it was found that seven of them were due primarily to peritonitis and paralytic ileus. Four of the seven died within an average of 24.5 hours after operation indicating, it would seem, that they were extremely poor operative risks. It no doubt would have been better to have used conservative therapy in those cases as all of them were neglected, severely ill, distended patients. The three other patients dying from peritonitis died on an average of 8.6 days after operation. One of these was a six-year-old child with a severe associated pyelitis, and one was a woman of 59 years who died rather unexpectedly. The third was a patient who had been subjected to bilateral salpingoophorectomy for hydrosalpinx at the time of the removal of the ruptured appendix. She bled intermittently from her wound and died on the eighth postoperative day. There is no doubt but that poor judgment was exercised in the management of this case. Two deaths were due to subphrenic abscesses: one of them was undoubtedly present at the time of the original appendectomy as the patient died two days later, autopsy revealing the abscess; the other patient was thought to have empyema, and a rib resection was done. The abscess was inadvertently opened into the pleural space with subsequent death.

The operative mortality in this series of cases, as low as it is, could have been lowered considerably had not five very seriously ill patients been subjected to operation. There was one death in which the operator apparently used poor judgment, and another in which the correct diagnosis of a subphrenic abscess might have produced a happier result. The events leading up to the cause of death in the other two cases are not clear enough to supply a clue as to what might have been done to prevent a fatality.

One should not assume that we advocate striving for a good operative mortality alone, but rather that there is possibly a small group of patients to be benefited more by conservative than radical therapy. We are convinced that this group is

[5] Horsley, J. Shelton, Horsley, John S. Jr., and Horsley, Guy W.: Appendicitis: Newer methods of treatment. *J.A.M.A.* **112**:1288 (Sept. 30) 1939.

small, and that it is probably composed of those seriously ill patients with generalized peritonitis and rather marked abdominal distension. Since most of these patients seem to die from the train of events resulting from paralytic ileus, we are treating some of them with prostigmine. We have had no promising results from various other procedures such as continuous gastric expression and the Miller-Abbott tube.

It would seem that a more general realization of the technical difficulties encountered in the removal of the acutely inflamed appendix might further result in a lowering of the mortality in this disease. Appendectomy for acute appendicitis is a difficult procedure and should not be too lightly attacked by the uninitiated. Good relaxation from a properly administered anesthetic is quite important. In this connection it should be remembered that spinal anesthesia is excellent, particularly for robust young men who notoriously take a poor inhalation anesthetic.

It is doubtful if the mortality in appendicitis can be substantially lowered until the incidence of perforation is diminished. A factor in this connection which does not seem to have been stressed is the tendency among many physicians to implicate organs other than the appendix as the cause of certain types of rather atypical acute abdominal pain. It cannot be too strongly stated that until there is a general realization that the acutely inflamed appendix is the most common cause of serious abdominal pain, particularly right lower quadrant pain, and that it is the only organ in this region in which delay in treatment may result seriously, there will continue to be a high incidence of perforation and subsequent peritonitis.

412 S. E. Fourth St.

ABSTRACT

NATIONAL VENEREAL DISEASE PROGRAM

"Present world conditions underline the vital necessity for cooperation on the part of the private physician with the national venereal disease control program and the need to push forward on all fronts in the campaign," Surgeon General Thomas Parran of the United States Public Health Service said in acknowledging the action of the American Medical Association in support of the Federal program.

Syphilis and gonorrhea are not only major military disease problems, Dr. Parran pointed out, but "they may easily constitute a bottle-neck of illness which would seriously hamper industrial and other defense activities."

"The responsibility and obligation of protecting the armed forces and the industrial manpower of the nation lics squarely on the physicians and health officials in each and every community in the United States," the Surgeon General emphasized. "The control of venereal disease today remains a health problem of major national concern."

Published September fourth in Venereal Disease Information of the U. S. Public Health Service, the resolution adopted at the recent annual meeting of the American Medical Association reads:

WHEREAS, An expanded program for the control of the venereal diseases throughout the States has been made possible by Federal grants-in-aid to States to be used specifically for this purpose; and

WHEREAS, Upon State health departments has been placed the responsibility for the judicious and wise expenditure of such funds; and

WHEREAS, The organized medical profession of this country has likewise a responsibility in this particular problem, as it has in all other health problems affecting the Nation; and

WHEREAS, Because of the magnitude and scope of any Nation-wide program looking to the control of the venereal diseases, the House of Delegates of the American Medical Association recognizes the need for the fullest cooperation, aid, and counsel from the practicing profession; and

WHEREAS, The proper control of these diseases depends upon adequate, continued treatment; and

WHEREAS, The treatment of the sick individual is the province of the practicing physician; and

WHEREAS, The modern technics employed in the treatment of the venereal diseases requires a familiarity with such technics as well as a knowledge of the diseases themselves: Therefore be it

RESOLVED, That it is the sense of this House of Delegates that such cooperation on the part of the medical profession should be freely extended and that the official health agencies, State and local, charged with the administrative responsibilities for the conduct of the program be urged to formulate plans and machinery for as full utilization as possible of such numbers of the local medical profession as are willing and competent to undertake the clinical management of such programs; and be it further

RESOLVED, That it is the sense of this House of Delegates of the American Medical Association that constituent State medical associations and component county societies should cooperate fully in the effort to improve the quality of clinical services to be rendered in venereal disease control programs; and be it further

RESOLVED, That it is the sense of this House of Delegates of the American Medical Association that a reasonable compensation should be paid physicians serving in the venereal disease clinics; and be it further

RESOLVED, That it is the sense of this House of Delegates of the American Medical Association that because of the potential dangers of intravenous therapy, such medication should be administered only by a duly qualified physician.

ANNUAL REPORTS OF ALL COMMITTEES ARE PUBLISHED IN THIS ISSUE. READ THEM.

FRACTURES OF THE NECK OF THE FEMUR*

A GENERAL CONSIDERATION OF SOME OF THE METHODS OF TREATMENT AND SPECIAL REFERENCE TO THE USE OF THE TWO-PLANE DIRECTION AND RANGE FINDER OF ENGLE AND MAY

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It is not my intention in this paper to cover the entire field of reports, methods of treatment, and the mass of information both good and bad upon the subject of fractures of the neck of the femur. This has been one of the most discussed of all fractures and until recent years no unanimity of opinion concerning treatment existed. About four years ago Kellog Speed captioned his oration on this subject before the American College of Surgeons, "The Unsolved Fracture." Since that time a great amount of information has been formulated in the treatment of this condition. This information has been summated on the basis of anatomical considerations, physiological and mechanical functions of the hip joint, and the natural conditions of the tissues in and around the hip joint due to the degenerative changes of advanced age in which a great majority of these fractures occur.

It is not necessary to review the anatomy of the neck of the femur except to state that a definite axial strength for weight bearing is essential in treatment of these fractures. Absolute reduction of the deformity in order to restore this axis is indispensable. Any change of the axis of the neck with the shaft leads to changed mechanics of support, followed often by early absorptive changes in the bone and disturbance in the bone repair process. Any amount of coxa varus after reduction is particularly undesirable because of the tendency to rotate the articular surface of the head too far downward in the acetabulum. While any great amount of coxa valgus is not to be desired, nevertheless, it will result in better function because the articular surfaces are better approximated.

The blood supply to the head and neck may also be disturbed from imperfect reduction of the deformity with resultant changes in the cartilages, disturbance in the osteogenetic processes, and breaking down of the head. The head and neck of the femur receive their blood supply from three sources. The principal blood supply to the head of the femur is from the posterior branch of the obturator artery, entering the hip joint through the acetabular notch, ramifying in the fat at the bottom of the acetabulum, and sends a twig along the ligamentum teres to the head of the femur. The second source comes from the profunda femoris through the branches of the internal and external circumflex arteries and the first perforating artery. The third supply is received through branches of the muscles that are attached to the neck and trochanters and also branches of the anterior and posterior capsular vessels. Any great amount of rotation of the head resulting in torsion of the nutrient artery will most certainly result in necrosis of the head and imperfect end results with non-function. Spicules of bone from the neck may also result in a lack of blood supply with concomitant necrosis of the bone. The more pronounced changes result in a functional disability and pain with poor prognosis for anything like a normally useful hip joint and leg. It is, therefore, obvious that the greatest of care should be exercised so as to obtain a perfect reduction of the deformity before any type of treatment is undertaken.

I have passed through three periods in the treatment of these fractures. During my early years no single mechanical method was utilized as a routine particularly in elderly people. Many of these cases had degenerative vascular changes, cardiac and renal disease and, therefore, they were simply put to bed with sand bags to support the leg and the family informed that all we could hope for was to keep the patient alive, no consideration being given to the results that might be obtained in so far as function of the leg was concerned. We are all familiar with the results. The shock was often too much and we tried to comfort ourselves, after the patient had expired, with the thought that it was a blessed benediction.

In 1822, Sir Astley Cooper, in his book on fractures and dislocations, stated that he had seen only one femoral neck fracture heal by bone union. With the present methods of operative internal fixation, approximately 70% of the cases have bone union with good function. Today practically no patient is refused operative fixation of these fractures except those imminently moribund. "To treat these fractures in the aged with Bucks extension, sandbags or no treatment at all other than recumbency in bed is true negligence." (Leadbetter)

A second method which I have used very extensively and which has been far more successful so far as mortality is concerned is the use of the double spica plaster cast. The immobilization of the injured hip by this method is excellent and the patients can be given meticulous nursing care. They can be turned from side to side in bed, elevated to almost sitting position, bathed frequently to stimulate circulation, thus avoiding decubitus ulcerations and hypostatic pneumonia. I have seen many of these patients take a light

* Read before the Randolph County Medical Society, Union City, Indiana, June 26, 1940.

ether anesthesia and tolerate the application of the spica cast exceedingly well. This treatment was first described by Whitman and the period between 1915 to about 1931 has been described as the Whitman period. The morbidity, however, in this method of treatment has been too disturbing. These cases, necessarily, were kept in the casts from ten to twelve weeks and sometimes much longer. The arthritic changes resulting in the knees, ankles and hips were a great worry to the doctor and extremely discomforting to the patient. Many of my cases did not have good union due either to absorptive changes of the head or failure to maintain proper apposition of the fragments.

I have, therefore, been eager to attempt some other method of treatment in which both the mortality and morbidity would be lower and the treatment not too complicated. After studying various methods and reports of the results of these methods, I have endeavored to acquaint myself with the operative internal fixation method as devised by Engle and May of Philadelhia, using the Smith-Petersen nail. Many other good methods of operative fixation are being used, such as the bone pin, the Moore nail, and the ordinary wood screw. These different methods have been modified and various gadgets devised for use in the technic of the operation as the result of two influences: first, most surgeons have a certain amount of mechanical ability and therefore are continually devising new instruments for the manufacturers to display; second, we all find it necessary to adjust ourselves to our surroundings, using the particular method or methods most adaptable to our individual use.

In my opinion, the mechanical principle of the three-flanged nail, devised by Smith-Petersen of Boston, is more sound than that of pins, nails, screws or bone grafts. It displaces a minimum amount of bone in its introduction and effectively prevents motion in all planes. About eight years have elapsed since the first report on the use of this type of nail was published. It has gained wide favor and is being used extensively by surgeons throughout this and other countries.

There are some disadvantages to the use of the nail. Like any other mechanical procedure certain technicalities are essential in its use. A thorough knowledge of all the detailed steps of its introduction are necessary in order to obtain the best results. Radiographic technique is sometimes difficult and time consuming but is absolutely indispensable. One flat plate including the entire pelvis and both hip joints is made upon admission to the hospital for diagnosis. One antero-posterior plate after reduction to determine whether reduction is satisfactory and one antero-posterior and one lateral are made during the operation. After the nail has been driven home, antero-posterior and lateral plates are desirable. The improved nail with the fixation key pin has practically eliminated one of its earlier objections, namely, that of expulsion. In some of the cases, however, even the key pin does not prevent this difficulty, especially if there has been absorption with shortening of the neck of the femur. This lock or key pin may prove to be an undesirable part of the mechanics also in certain cases of absorption and shortening of the neck. In those cases the point of the nail has been found to protrude through the head too far into the cartilage thus producing an inflammation or arthritis of the hip joint. Infection of the nail or pins is a very serious complication. The greatest of care in asepsis must be used. The insertion of any metallic substance across the fracture plane through the bone enters the hematoma about the fracture and violates one of the principles of skeletal traction. This principle, however, is violated in the use of the Lane Plate and other metallic substances used in the treatment of fractures of the long bones. The rigid "no hand touch" technic is the safety requirement in the prevention of this serious complication. Other minor objections have been made to the use of any type of operative internal fixation, such as the use of expensive instruments, the necessity of trained technical assistants, the resultant shock that frequently is seen in operations upon the individual of advanced years, and the necessity of some type of anesthesia, usually general or spinal.

The type of anesthesia to be used in the operative internal fixation of these fractures is a matter of personal opinion. Spinal anaesthesia has been favored by a great many operators and I have used it in a few cases. In my early work we were not equipped with a shock proof x-ray unit and, therefore, inhalation anesthesia was not safe. Since a mobile shock proof x-ray equipment is now available, I prefer the use of a light ether anesthesia. I do not like the shock that spinal anesthesia produces in old people. In one case the blood pressure dropped to zero in about three minutes after the injection of metacaine intraspinally and for a while it looked as if the patient would not survive. Fortunately, however, with the help of good assistants, the continuous use of venoclysis of 10% glucose and the use of adrenalin, we were able to complete the operation. I believe a light ether anesthesia for about thirty to forty minutes, which should be all the time required for the operation, is safest for most cases. A great many operators will not agree with this statement and, as mentioned in the beginning of this paragraph, the personal opinion and the element of experience in the use of any type of anesthesia decides whether the patient should have one type or another.

The preoperative preparation of these cases is rather important. Some cases may be operated the same or following day of admission to the hospital; others that present evidence of shock, cardio-vascular and renal disease, general debility, etc., should have the advantage of a few days' preparation. The blood pressure, urine, and blood chemistry can be studied and measures instituted that will frequently change a hopeless looking case into one of fair surgical risk. Transfusions of blood and/or glucose 5% are very helpful during

this stage of preparation. Intravenous salt solutions are not usually desirable as many of these cases have some renal impairment with perhaps a slight amount of edema and increase of the blood chlorides. The concentration of the serum proteins is further decreased by the salt and thus the patient is hurried down the grade of mental confusion, coma and uremia. The preparation should be the same that would be employed in the preparation for any type of surgery and in addition the leg should be kept in some type of immobilization to prevent further shock.

For the technic of the use of the Two-Plane Direction and Range Finder as described by Engle and May of Philadelphia in using the Smith-Petersen nail, the reader is referred to the *Journal of American Medical Association* for May 28, 1938.

The after treatment of these cases is divided into two stages, the immediate post-operative care and the more remote care. The immediate post-operative care for the first three or four days is similar to the post-operative care of any surgical patient. They are usually kept in bed during this period, care being taken to prevent infection of the wound and dressings changed as necessary. They are turned from side to side and elevated from the very first in order to prevent post-operative complication of the lungs and also pressure sores. Intravenous fluids are occasionally indicated but usually a liquid or light soft diet can be taken during the second twenty-four hours. The injured limb is kept supported on one or two pillows and the patient is encouraged to move the hip and knee joints with his own muscular power. The great benefit in this method of treatment of fractures of the neck of the femur is seen during the remote stage of the after care. The older methods usually kept these patients in bed many weeks and particularly is this true with the double spica plaster cast. Frequently they became confused, refused food, lost strength, and became very much discouraged, making the whole picture one of difficulty for everyone concerned. With present methods of treatment, these patients are placed in a chair any time after the first three or four days, which is in itself a great deal of encouragement, particularly to an older individual. They find that they can move the injured hip, knee and foot without pain which is another point in keeping up a good morale. After three or four weeks have passed and the cases have progressed satisfactorily, they are supplied with a walking frame which permits them to move about their homes without putting any weight on the injured limb. I have seen some of these cases who have been permitted full weight bearing after one month's time. I believe this is too early because there is not sufficient time for bone callus formation. In other words, the patient who walks this early is simply walking on his Smith-Petersen nail and this alone may stimulate absorption of the bone with loosening of the nail and unsatisfactory results. I believe in adhering to the old rule, namely, to permit full weight bearing only after a period of six months has elapsed. If these patients are supplied with some means of getting about their homes they feel that they are not entirely dependent on the other members of the family and are happy and contented during this short period. Most of them are beyond the wage earning age and, therefore, are not required to hasten their activities. The small amount of activity which is granted them merely keeps them encouraged and also prevents atrophy of the bones from disuse and arthritic changes that are likely to develop in old people when their movements are restricted.

111½ SOUTH MAIN STREET.

ABSTRACT

IRREPARABLE LOSS OF FUNCTION NEED NOT ACCOMPANY PARALYSIS

Paralysis does not necessarily mean an irreparable loss of function; with proper care and with nature's own tendency to restoration, voluntary use of the afflicted part frequently returns, Richard Kovacs, M.D., New York, observes in *Hygieia, The Health Magazine* for August.

Foremost among the factors influencing the outlook for recovery is the possibility of removing the cause. Paralysis is not a disease in itself, Dr. Kovacs explains, but a symptom of damage to the motor part of the nervous system, which consists of the brain, the spinal cord and the nerves leading to the muscles of the body.

Recovery also depends on the proper treatment of the paralyzed part and on the amount of destruction wrought in the nerve centers. "The nervous system differs from all other tissues in the body in the respect that when central nerve cells are destroyed, they do not grow again," the author says. "Any function which depends on the action of these sensitive centers is, therefore, lost. Fortunately, in many affections of the nervous system due to disease or to injury some of the nerve cells are only temporarily benumbed by pressure or inflammation.

"Among the many forms of paralysis are the following: Infantile paralysis, caused by inflammation in the spinal cord brought about by germ invasion; hemiplegia or paralysis of one side of the body, caused by hemorrhage or clotting of blood in the brain; paralysis of nerve trunks in the limb, sometimes caused by injuries or poisoning; paralysis of the facial nerve, sometimes caused by a chilling draft, and paralysis of other nerves, caused by new growths or tumors in various parts of the body. Paralysis may be due to an inflammation of the brain caused by an infection from the ear or by a contagious disease."

Although treatment varies according to the type of paralysis, the general principles of treatment include suitable rest, gentle massage, exercise, heat and muscle stimulation. The early application of splints will prevent many deformities. Skilled technicians must administer massage and direct the exercise, for it is important that the muscles not be taxed beyond their power.

GASTRIC ANEMIA SYNDROMES

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Science, with its new technics and reasoning based on a rational empiricism, is beginning to have a more and more profound effect on the life and thought of the world. The effects of this new technic and discipline are everywhere visible and are influencing, to a great extent, recent critical and analytical thought. Prior to this, in the absence of a lucid, cogent science, philosophic thought and doctrine were mainly concerned with metaphysical abstractions productive, at times, of pure, fine speculative flights of fancy unmoored to the mundane. With the advent of modern science, there has been an entire reorientation in the philosophic world as expressed in the current winds of doctrine, variously known as logical positivism or scientific empiricism which, with recent advances in science, promises to become increasingly effective and more significant. This significant critical movement presents certain constructive theses and entrenches science in its preoccupation with a criterion of meaning based on empirical verifiability of any presumably significant thesis, and suggests the idea that the same methods of empirical and logical analysis be applied to the critical examination of empirically discoverable generic traits of natural existence in all fields.

With these considerations as a basis, it is felt that not only should the entire spirit and methodology of science reflect this new functionalism, but also the terminology and nomenclature should reflect the same spirit in terms of rigid descriptive qualities. It is hoped, therefore, that this concept will influence a new and rational nomenclature throughout medicine, much more descriptive and characteristically specific in the light of the most recent clinical and pathological findings, in place of the time honored and traditional.

A resume of modern literature elicits, in response to a correlatory technic, facts concerning the association of achlorhydria and achylia gastrica to severe constitutional syndromes involving the hematopoietic system such as pernicious anemia and hypochromic anemias. Achlorhydria, hypochlorhydria and achylia gastrica are all presumed to be different degrees of the same gastric secretory depression. Achylia gastrica is the most severe of these all and represents a loss of gastric ferments in addition to loss of free HCL. There is still much difference of opinion as to whether in achlorhydria the lack of HCL represents an extreme functional depression of secretion or whether there is an organic atrophy of the mucous membrane. This symptom or sign represented in general as a depression of gastric secretory activity is very common and is estimated to be present in about 35% of cases with gastrointestinal symptomatology, and was found to be present in about 14.5% of cases in one series of 3,381 patients tested at the Mayo Clinic in 1932 (all of these cases being presumably free of gastrointestinal disease).

Achlorhydria is most commonly secondary to or associated with chronic debilitating diseases such as gastric carcinoma, gastric syphilis, partial gastrectomy, pulmonary or visceral tuberculosis, and chronic alcoholism. This group represents definite organic disease of the gastric mucosa itself. There is also an infectious group of diseases associated with achylorhydria such as chronic cholecystitis, chronic intestinal infections and parasites such as Dibothriocephalus latum and sprue. Many cases of achlorhydria are incidentally associated with mineral and vitamin deficiencies as a result of a depressed nutritional function. Because a depressed gastric function, which inhibits the absorption of these necessary elements in the dietary, the whole takes on the elements of a vicious cycle which must be broken at its nutritional functional point to overcome the profound constitutional concomitants with which the entire syndrome is associated.

The chief mineral deficiencies consist of calcium, phosphorous, iodine, iron, copper, manganese and sulphur, and to this type of deficiency may be attributable the frequently associated nervous instability and emotional irritability to which our forebears gave the name of the dyspeptic disposition or dyspeptic temperament. Because of the great relative frequency of achlorhydria, or depressed gastric secretory function, it is deemed advisable that gastric analysis, simple and fractional, as indicated in the individual cases, should become a routine examination in all cases particularly in those cases presenting a chronic ailment with a vague symptomatology.

Pellagra is an achlorhydric anemic syndrome. Most cases of pellagra either show absence or diminished hydrochloric acid in the stomach. The food intake in the South, where this disease is most prevalent, is not conducive to stimulating the acid secretions of the stomach. The resultant hypochlorhydria or achlorhydria which supervenes is a premonitory sign of the developing pellagra syndrome. This achlorhydria might persist for years before any signs of anemia develop. If the diet continues to lack iron finally the anemia develops. With the suppression of gastric acidity comes a change in the intestinal flora with resultant diarrhea and stomatitis. The stomatitis is the result of a chronic infection with ascending intestinal bacteria through a patent pylorus. The basis of this pernicious cycle is the meagre, unvaried, unstimulative diet of the average southern individual subsisting on the prevalent low subsistence stand-

ard. The usual diet in this area (South) consists of corn products served monotonously in the form of corn meal, corn mush, corn whiskey and corn bread; also, fat pork, ham, much milk and buttermilk rich in fat, with very little fresh meat and little or no green vegetables. This, as above stated, is conducive to hypochlorhydria and depression of gastric function and secretion with resultant gastric atrophy. Sprue produces a chronic stomatitis on an infectious basis, the probable etiologic agent being the monilia organism, which probably ascends from the small intestines. This entire syndrome is primarily based on a depleted nutritional intake and is corrected by low fat and raw fruit diet.

With the development of hypochlorhydria, there is initiated a progressive process (unless checked by appropriate medication) which proceeds to achlorhydria, gastric atrophy and finally the severest and most constitutionally depleting pathologic picture—achylia gastrica. This condition results in depression and absence of free HCL, absence of gastric ferments, and most important the intrinsic factor of Castle which together with the extrinsic factor in ingested fresh meat, constitutes the normal stimulatory process which maintains a normal hematopoietic balance. This is the concensus as to the mechanism of hematopoietic function and explains various dysfunction syndromes on the basis of the variously lacking elements. Some of the achlorhydric anemia syndromes are pellagra, sprue and the alcoholic anemias. The most severe anemia, the achylia gastric anemia, is the familiar so-called pernicious anemia.

One out of four people in the South develops achlorhydria, although forty percent of this group develop anemia. In a recent experiment, a series of 100 previously diagnosed achlorhydric anemias were placed on brewer's yeast and reduced iron therapy with traces of copper. This in combination with a diet rich in fresh vegetables showed immediate results of a nutritional replacement therapy with improvement of anemia in all cases. There was no case that did not respond to this therapy which is therapeutic proof of the thesis.

As an incidental corollary of this reasoning, there has never appeared a case of achlorhydric anemia or achlorhydria associated with peptic ulcer. This is one reason for explaining the relatively low incidence of peptic ulcer in the South. It would seem as though there is an inverse relationship between the prevalence of pellagra, sprue, pernicious anemia and peptic ulcer, with the much greater incidence of peptic ulcer in the northern and industrial sections of our country with a relatively higher standard of living.

With the advance of knowledge concerning the interrelationship of gastric function with the hematopoietic state of the individual, the use of such indeterminate terms as pernicious anemia is no more valid in the light of what we know of the larger syndrome and the spectra of syndromes, most adequately described as the gastric anemias, basing the concept on the elemental nutritional factor. And further following this thought, we begin to see that no longer can medicine be categorized as a system of separate unrelated clinical entities, but rather as a vast scheme of interrelated phenomena, with a common physiologic and pathologic substratum to give cohesion to the whole. This is an integratory process that has slowly been proceeding with our progress and our growing predictability and control of medical phenomena to hand. There is even the added concept of the relation of the health of a nation to the mineral potency of the soil on which the vegetable and animal food stuffs are cultivated. The most important concomitant of this concerns the agriculturalist whose efficiency prevents depletion of the mineral content of the soil.

In the light of the basic concepts above detailed and in order to make medicine a more objective and specific science abreast with its own most recent progress, it is proposed that the time-honored, traditional nomenclature exemplified by the term pernicious anemia be discarded, and—as affects the hematopoietic diseases—the term gastric anemias be substituted; the term achylia gastric anemia, being the concomitant of the old pernicious anemia, and the term hypochlorhydric anemia representing the present hypochromic anemias or commonly called secondary anemias. With the advent of this type of nomenclature will come a thoroughly modern system, more functional and more intelligible.

PROTOCOL OF CASES

Case 1.

Patient M.N.Y., admitted February 18, 1938. Admission diagnosis—gastro-intestinal condition, undetermined. X-ray of February 23, 1938, showed stomach, duodenum and colon normal. Gastric analysis of February 23, 1938, showed a total acidity of 28 and free HCL 0. Histamine fractional gastric analysis of March 1, 1938, showed a maximum total acidity of 10, a minimum total acidity of 6. Free HCL 0. This patient was placed on dilute HCL m.xv t.i.d., with improvement of the gastric complaints. The blood count was 5,250,000 with hemoglobin 85%. This is a subclinical entity and the patient improved on the mere improvement of digestive function by the use of HCL by mouth.

Case 2.

Patient R.B.H., admitted November 10, 1937, for abdominal pain and vomiting. Gastric analysis of November 12, 1937, showed a total acidity of 10 degrees and free HCL of 0 degrees. Blood count 5,200,000, hemoglobin 85%. Gastro-intestinal series of November 17, 1937, was normal. Patient was treated with HCL by mouth with improvement and discharged November 19, 1937.

Case 3.

Patient L.R., admitted August 20, 1937, for colitis with symptoms of nausea and pain in the stomach. Gastro-intestinal series of September 1, 1937, showed a normal stomach, duodenum and

colon. Gastric analysis of August 28, 1937, showed total acidity of 2 degrees and free HCL 0 degrees. Patient was placed on HCL m.xxx t.i.d. Blood count of August 21, 1937, showed red count 4,320,000. Hemoglobin 90%. Patient was discharged December 1, 1937, with amelioration of symptoms. The above three cases might be considered to constitute a subclinical group with very few signs and symptoms, but requiring frequent check-up to arrest any progress toward aggravation of the condition.

Case 4.

Patient A.M., admitted August 26, 1938, for treatment of diabetes mellitus. The blood count of August 27, 1938, showed red count of 3,450,000 with hemoglobin 85%. Gastric analysis of September 16, 1938, showed a total acidity of 8 degrees and free HCL of 0. This patient was placed on copper and iron therapy by the use of Lextron capsules and HCL m.xv t.i.d. The blood count on discharge showed red count of 4,450,000 with hemoglobin of 85%. Patient discharged September 30, 1938, much improved.

Case 5.

Patient J.M.W., admitted September 2, 1938, for treatment of chronic gastritis. The red count of September 5, 1938, showed 4,751,000 with hemoglobin of 80%. The gastro-intestinal series of September 12, 1938, showed normal findings. The gastric analysis of September 10, 1938, showed a total acidity of 4 degrees and free HCL of 0 degrees. A fractional gastric analysis with histamine was done September 15, 1938, and showed a maximum total acidity of 12 degrees to a minimum of 8 degrees. The free HCL was uniformly zero. Treatment here consisted of free HCL by mouth for ten days with improvement of gastric symptoms, poor appetite and flatulence. This is a case that should be closely followed because of the precursor signs and symptoms which may develop into an achlorhydric or an achylic gastric anemia.

Case 6.

Patient L.K., admitted June 23, 1937, with diagnosis of prepyloric or duodenal ulcer. His complaints on admission were pain in the stomach lasting about 30 minutes and burning after meals. Patient was markedly undernourished. A gastro-intestinal series of June 24, 1937, showed emptying of stomach on 6 hour film with the head of the meal in the transverse colon. A diagnosis of prepyloric ulcer was made due to deformity in the prepyloric region. The red count of June 24, 1937, was 5,600,000, hemoglobin 90%. Gastric analysis of July 7, 1937 (fractional gastric analysis with histamine) showed total acid 10 degrees as a maximum value to a minimum value of 4 degrees. The free HCL was uniformly zero. Examination by a consultant on July 3, 1937, elicited the diagnoses of prepyloric ulcer with achylia gastrica. These are somewhat paradoxical diagnoses. It seems highly improbable for both these types of conditions to coexist. Patient refused an exploratory laparotomy and appendectomy and was discharged unimproved.

Case 7.

Patient E.L.B., admitted December 14, 1936, with admission diagnosis of diarrhea. On December 14, 1936, the red count was 4,900,000 with hemoglobin of 90%. Fractional gastric analysis with histamine of December 13, 1936, showed a total acidity that varied from three degrees to zero. Free HCL was uniformly zero. Gastro-intestinal series of December 21, 1936, on the 6-hour film showed that the meal had reached the rectal pouch, indicating very rapid functioning time of gastro-intestinal tract. This is in keeping with gastric hypofunction which, because of lack of acid in stomach, causes a chronically patent pylorus with necessarily rapid function.

Case 8.

Patient R.F.A., admitted October 27, 1936, to determine the status of function of his posterior gastro-enterostomy. A gastric analysis of November 5, 1936, showed a total acidity of ten degrees varying to a minimum of six degrees. Free HCL—0. The blood count of October 28, 1936, showed a red count of 4,220,000 with a hemoglobin of 85%. A gastro-intestinal x-ray of October 28, 1936, showed a well functioning gastro-enterostomy with the head of the meal in the rectal pouch after six hours. Inasmuch as a gastro-enterostomy opening is always patent, the same findings as regards hypermotility are found in this case as in cases of hypofunction of the stomach. Because of the similarity of the conditions—the mechanically fast emptying time—we find in this case as in cases of ordinary hypofunction of the stomach, a beginning secondary anemia. With this rapid emptying time, there is inability to digest minerals such as copper and iron with corresponding hypofunction of the hematopoietic system. With hypofunction of the stomach mucosa, a diagnosis of gastric ulcer should be looked on with skepticism and even with positive radiological findings a long period of medicinal treatment should be inaugurated before even considering more drastic techniques.

SERIES OF (PERNICIOUS) ANEMIA-ACHYLIC GASTRIC CASES

Case 9.

Patient L.C., admitted December 6, 1937, with a diagnosis of pernicious anemia. Fractional gastric analysis of December 28, 1937, with histamine showed a total acidity of 10 degrees to a minimum of 6 degrees with a uniform finding of free HCL of 0 degrees. Blood count of December 17, 1937, showed a red count of 2,890,000 with hemoglobin of 60%. This patient was placed on liver therapy plus lextron and HCL by mouth December 10, 1937. Blood count of December 17, 1937, showed 3,230,000 with a hemoglobin of 82%. This is a typical case of achylic gastric anemia which improved on liver

therapy, acid and lextron which includes the element of copper in its formula.

Case 10.

Patient F.D.S., admitted June 4, 1937, with diagnosis of pernicious anemia. Blood count on admission: red count 2,600,000 with 70% hemoglobin. The count June 21, 1937, was 3,430,000 with hemoglobin 80%. On July 22, 1937, the count was 4,030,000 with hemoglobin 85%. July 28, 1937, the count was 5,000,000 with hemoglobin 90%. The treatment consisted of intramuscular liver, HCL gtts., xxx, t.i.d., and ventriculin gr. xxx t.i.d. Gastric analysis of June 12, 1937, showed total acid of 2 degrees and free HCL, 0 degrees. Patient was discharged as improved August 12, 1937.

Case 11.

Patient R.G., admitted July 18, 1937, with diagnosis of pernicious anemia, weakness, and pain in the back. Gastric analysis of July 21, 1937, showed total acid 12 degrees and free HCL zero. His blood count was 4,820,000 with hemoglobin 80%. On July 23, 1937, his blood count was 5,561,000 with hemoglobin 80%. Patient was treated with liver extract, Lextron capsules and HCL with marked improvement on discharge August 6, 1937, after nineteen days in the hospital.

Case 12.

Patient A.C., admitted May 24, 1937, with blood count of 2,570,000 and hemoglobin 75%. Gastric analysis of June 1, 1937, showed total acid of 25 degrees maximum varying to a minimum of 15 degrees. Free HCL was uniformly zero in this test, which was a fractional gastric analysis with histamine. On June 14, 1937, the count was 3,540,000 with hemoglobin 80%. On July 10, 1937, the red count was 5,000,000 with hemoglobin 90%. Patient was placed on HCL xxx drops t.i.d., ventriculin gr. xxx, t.i.d., and liver extract intramuscularly once a week.

Case 13.

Patient E.E.W., admitted March 24, 1937, with a diagnosis of anemia. The blood count on admission was 1,390,000 with hemoglobin 29%. On March 26, 1937, fractional gastric analysis with histamine showed a total acid of 6 degrees and free HCL zero. Patient was given a blood transfusion on March 26, 1937. The blood count on discharge May 14, 1937, was 5,190,000 with hemoglobin 90%. Patient was treated with intramuscular liver extract, ventriculin by mouth, and dilute HCL.

CONCLUSIONS

(a) The diagnosis of peptic ulcer should be looked on with extreme skepticism in the face of rapid emptying time and hypofunction of the stomach.

(b) Positive x-ray findings notwithstanding, cases of achlorhydria or hypochlorhydria should be given the benefit of a long course of medicinal treatment before more drastic treatment is considered except where malignancy has been diagnosed.

(c) The state of the hematopoietic system should be carefully evaluated in all cases of supposed peptic ulcer or of gastric dysfunction.

(d) The relationship between the function of gastro-intestinal system and the state of the hematopoietic system should receive due recognition both in therapy and nomenclature.

ABSTRACTS

DIAGNOSIS LIST

A list of diagnosis categories especially adapted to the tabulation of the causes of hospital and other morbidity data was made public September sixth by the United States Public Health Service.

William L. Austin, Director of the United States Bureau of the Census, and Surgeon General Thomas Parran of the Public Health Service in a joint statement outlined a new three-digit system to be used for coding purposes.

The first two digits denote general categories of illness while the third separates them into specific diseases or disease sites.

A special committee of consultants worked with the United States Public Health Service and the Vital Statistics Division of the United States Bureau of the Census in setting up this diagnosis list which was based on the last revision of the International List of Causes of Death. (Public Health Reports, Vol. 55, No. 35.)

Preparation of an alphabetical index of medical terms to assist in assigning diagnoses to the proper categories is under way. When the index is completed, the code and index will be given a trial of several months in a number of hospitals and in special studies. Revision will be made on the basis of suggestions received and the experience gained in the trials. It is planned to publish the code with the complete index as a Public Health Bulletin. As such it will be available from the Government Printing Office.

BRITAIN PAYS INJURED CIVILIANS

"Air attacks have brought civilians into the same danger from air attacks as soldiers and so the government has made similar arrangements both for the treatment of casualties and for payments for disablement from injury," the regular London, Eng., correspondent of *The Journal of the American Medical Association* reports in its Sept. 21 issue. "The scheme for civilians applies to members of civil defense organizations injured while on duty and to all other civilians who depend on their earnings for a livelihood. It also applies to immediate dependents if the war injury is fatal. The grants in respect to injury are (1) a temporary injury allowance if the injury causes incapacity for work for not less than seven days; (2) a pension with family allowances if the injury results in serious or prolonged disablement. The temporary injury allowance for a married man is $8 a week, for a single man $5, for a woman $4.50. Pensions for serious or prolonged disablement will be at the same rates as in the fighting services. For permanent disablement a man will receive $8 a week, a woman $6."

Medicine Today

"Be not the first by whom the new are tried, nor yet the last to lay the old aside."

GEORGE B. METCALF, M.D., and FRANCIS C. GUTHRIE, M.D.
ANDERSON

H. R. ALBURGER, M.D.
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The following case report is submitted because of the unusual features which developed in the course of the case and the obscurity of diagnosis which was only determined by autopsy.

FAMILY HISTORY

R.W., male, white, age 49, at the close of a day's work on July 9th, 1940, complained of severe headache and malaise. A short time later he was nauseated and vomited. He returned to work the following morning, remained at his job throughout the day and in the evening again suffered severe headache and vomiting. In spite of increasing fatigue the patient continued to work for four additional days during which time the headache, nausea and vomiting became more constant. He also became aware of vague generalized abdominal distress.

At the end of the fifth day the patient agreed to consult a physician and traveled to a nearby town where he was examined in the office of a doctor friend. No diagnosis was made as the only objective sign was a moderate degree of fever. He was advised to return home and go to bed until he felt better. This the patient did without experiencing any improvement. Two days later one of us (Dr. G. B. Metcalf) was called to see him at his residence.

The patient's father died at age 65 from accident. His mother died at 50 of locomotor ataxia. One brother, age 34, is living and well. One daughter, age 28, and one son, age 17, are living and well.

His medical history elicited but two illnesses since the usual minor ones of childhood. At the age of 29, while living in a small town in Indiana, he had suffered for four weeks with what was diagnosed as typhoid fever. This diagnosis was not confirmed by either Widal reaction or blood culture. Recovery was complete and the patient was in good health for two years. Then, while working as a garage mechanic, he began to cough and lose weight and strength. The attending physician attributed his symptoms to exposure to exhaust fumes and advised him to quit his work. Neither x-ray nor sputum examination was made. The patient spent most of a year in the mountains of North Carolina where he regained his health. Since that time he has remained well, considered himself in robust health, and pursued his occupation of mechanic. For the past few months he had been employed as an instructor in a machine shop.

EXAMINATION AND PROGRESS

When examined he was complaining of severe headache, nausea, vomiting, abdominal pain of cramp-like nature, and constipation. He was well nourished, weighed 165 pounds, and was 68 inches tall. His tongue, lips and skin were very dry. His temperature was 99.6, pulse 60, respiration 20. The pupillary reflexes were normal and there was no evidence of weakness of the extrinsic muscles of the eye. The nose, throat, and thyroid gland were normal. Except for the slow pulse the cardiovascular system was normal. The breath sounds were audible throughout the chest, slightly diminished in intensity on the right, and there were no rales. The abdomen was distended and diffusely tender. The extremities were normal as were the deep reflexes. Scattered over the abdomen and the chest were small discrete red spots which disappeared on pressure and thus resembled rose spots.

These "rose spots," the bradycardia, the severe headache, the abdominal distention and tenderness combined to create the impression of typhoid fever. The patient was removed to St. John's Hospital on July 16, 1940, for further study.

On the following day the patient was becoming drowsy and uncooperative but the clinical condition was otherwise unchanged. Laboratory reports were: (1) urinalysis revealed two plus albumin but was otherwise negative; (2) blood revealed hemoglobin 92% (Dare), erythocytes 4,620,000, total leucocytes 12,850 with 80% polymorphonuclears and 16% lymphocytes; (3) agglutination tests for typhoid, paratyphoid A and B, dysentery, undulant fever and tularemia all were negative.

That night the patient had a violent chill followed by a sharp rise in temperature, which reached 104 degrees rectally, and a moderate rise in pulse rate to 90. He became semi-comatose and was irrational when aroused. Consultation was decided upon and obtained. The pupils at this time were equal and responded normally to light. The neck muscles were slightly but definitely stiff and the deep reflexes slightly exaggerated. Spinal puncture was performed. The fluid was under 545 mms. of water pressure and was very slightly turbid. The pressure was very slowly reduced to 260 mm. of water by withdrawal of fluid and specimens were sent to the laboratory. Examination of the fluid gave the following results: total cell count 265, with polymorphonuclears 28% and lymphocytes 72%; sugar

100 mgm; globulin positive; Wassermann negative. On direct smear, a gram negative bacillus was reported which fact still lacks an adequate explanation for repeated cultures were negative for any bacterial growths. Blood cultures were made at this time and later but both were reported negative.

On the following day, July 19, 1940, the patient was clinically improved. He experienced periods of rationality, was much less irritable, was free from headache and had much less spasticity of the muscles of the neck. This improvement continued for forty-eight hours while those in attendance waited for the laboratory reports which have been given above. Treatment during this period was of necessity non-specific and consisted of general supportive measures, sedatives, and neo-prontosil.

By July 22, 1940, there were evidences of increasing meningeal irritation, neck rigidity, ankle clonus and positive Babinski on the right, and general increase in the deep reflexes. Spinal puncture was performed early on July 23rd. The pressure was above 600 mm. of water (the limit of capacity of the manometer) and had the gross appearance of the former specimen. The pressure was reduced by spinal drainage to 280 mm. of water. This specimen showed no bacteria on direct smear, no growth on culture, and gave a negative Widal reaction. Cell counts, globulin and sugar results were comparable to those of the former specimen. Widal reaction on the blood was also negative.

Clinical improvement did not follow this spinal tap or a subsequent one made on the following day. The patient steadily failed and died early on the morning of July 25th.

AUTOPSY

Autopsy was performed at St. John's Hospital on July 25th, 1940. The body had been embalmed by circulation method only, was still warm, and was a white adult male apparently about 40 years of age, about 5 feet 8 inches long and weighing 175 pounds. There were no significant marks externally.

On preliminary incision, the subcutaneous fat was about 1½ to 2 cm. thick; muscles were of good color and consistency.

Thorax: Costal cartilages were not calcified. On reflecting the sternum, the left lung was found to be voluminous while the right lung was held down by old fibrous adhesions which completely obliterated the right pleural cavity. The left pleural cavity was free from adhesions. Both lungs when removed were air-containing, the right less so than the left, but on section there was only diffuse congestion, no areas of solidification, no notable scars. The left lung weighed 600 gms., the right lung weighed 500 gms. which included part of the parietal pleura adherent to it which was about 3 mm. in thickness and of almost cartilaginous consistency. The pericardium showed no gross pathology; pericardial fluid was normal in amount; the heart weighed 400 gms. but was of normal shape and, when opened, showed no valvular lesions on either side, no marked dilatation or hypertrophy, the only significant finding being the rather soft, friable condition of the muscle of the left ventricle.

Abdomen: The abdominal cavity was entirely free from adhesions, but contained a marked excess of peritoneal fluid which in the lower portion of the abdomen, including the pelvis, was clear and colorless. In the upper portion, however, the fluid had a definite bile stain, especially on the left side. Intestines were removed and found to be well contracted, rather pale and showed no peritoneal roughening and no appearance of involvement of Peyer's patches. Mesenteric lymph nodes were not enlarged. Omentum was very fat and voluminous. The colon showed no gross pathology. The liver was large, estimated weight 2,000 grams; there was some congestion on section but no significant pathology either on the surface or on section. There was some masking of the normal liver markings. The gall bladder contained fluid bile with some stones. The stomach was torn in removing the spleen due to the fact that the posterior wall of the fundus was extremely thin and apparently definitely degenerated. The lower end of the stomach, however, was of normal thickness and showed the normal rugae. There were no ulcers of the stomach or duodenum. The spleen was rather large, weighing about 200 grams, normal in size, soft, and on section there was a considerable amount of stippling of the cut surface with prominent trabeculae but no marked apparent exaggeration of the Malphighian bodies. The pancreas was quite large, markedly firm, and apparently normal. The right kidney weighed 200 grams, surrounded by an extremely thick perirenal fat, surface congested and when the capsule was removed several small white nodules were found beneath the capsule, extending slightly into the substance. In the right kidney most of these nodules were in the cortex, but one was found in the medulla; they were about 3 mm. in diameter. The left kidney was slightly larger than its fellow, similar in every way except that there were several nodules in the medulla and in the columns of Bertini. The right adrenal was quite large and on section showed in the medulla extending to the cortex a rather large nodule, yellowish in color, sharply outlined from the adrenal substance which was suggestive of tuberculosis. The bladder was greatly distended, containing about 600 cc. of dark brownish urine and both on the surface of the bladder and on the mucosa there were numerous areas of hemorrhagic infiltration, shown as darkly purple, irregular islands. There was no evidence, however, of erosion of the mucosa. Prostate was apparently negative.

Head: Scalp was very thick and retracted with difficulty. Skull was of normal thickness. The dura showed no marked lesions. When the dura was removed, the exposed lepto-meninges were greatly congested and between the sulci there was a milkiness but no evidence of excess cerebrospinal fluid. Brain was rather large and apparently definitely

swollen but the congestion did not extend deeply into the brain substance and the ventricles were, if anything, smaller than normal and contained a small amount of slightly turbid fluid. When the brain was removed and sectioned there were no local lesions evident in the brain substance. At the base of the brain there was considerable milky fluid and some filaments of fibrin which extended through the foramen magnum into the subarachnoid space of the cord. No definite nodules of any kind were found in the brain or on the meninges.

Gross Diagnosis: Acute meningitis of undetermined origin. Brain swelling. Right chronic obliterative pleurisy. Acute myocarditis. Congestion of lungs. Parenchymatous degeneration of the liver, with marked congestion. Enlargement and congestion of the spleen with moderate fibrosis. Tuberculosis of right adrenal. Miliary tuberculosis of kidney. Degeneration of posterior wall of stomach. Negative intestinal tract. Moderate ascites.

Microscopic report of autopsy:

Adrenal: Shows large areas of caseation surrounded by a zone of lymphocytes with an occasional characteristic giant cell. Younger secondary tubercles are found in the peripheral zone.

Kidneys: Cortex shows a marked swelling of some of the epithelium while other tubules appear to be distended and the epithelium flattened. The major portion of the first section to be described is taken from the medulla, blood vessels of which are congested and contain hyaline casts. An area is seen of cell infiltration with lymphocytes in which the tubules are not present but which does not show distinct central necrosis or evidence of definite tubercle formation. Another section of kidney shows portions of the cortex in which are found a few small nodules without central necrosis but with peripheral zones of lymphocytes which are suggestive of very early miliary tubercles. There is marked congestion of the vessels of the medulla.

Stomach: The muscle coats are definitely thin; however, the mucosa is not necrotic and shows the normal glandular structure in cellular arrangement.

Spleen: Connective tissue stroma is normal. Spleen pulp is congested and somewhat fibrotic. Here and there in the spleen substance are found miliary tubercles with central necrosis and peripheral giant cell formation.

Heart: The muscle fibers are somewhat hypertrophied, many have lost their striation and nuclei and when cut longitudinally show fragmentation. There is some congestion between the fibers.

Liver: There is marked fatty infiltration in the central portions of the lobules and in the capsule of Glisson we find occasional miliary tubercles with central caseation and peripheral giant cells.

Pancreas: Apparently normal.

Brain: There is no evidence of involvement of the brain substance.

Microscopic Diagnosis: Caseous tuberculosis of adrenal. Miliary tuberculosis of the spleen, liver and kidneys.

In performing the autopsy the fluids surrounding the cord at the foramen magnum was notably turbid and smears made of the fluid showed high cellular content, cells predominantly lymphocytic but no tubercle bacilli could be demonstrated. Guinea pig inoculation of specimens of fluid were ordered but in some way neglected.

In the light of the autopsy we are able to conclude that this man had an old healed tuberculosis of the right pleura, a chronic tuberculosis of the adrenal, and a terminal miliary tuberculosis involving the liver, spleen and kidney with an acute cerebral edema and basalar meningitis without the formation of a localized tuberculous process in the cerebrospinal system.

ABSTRACTS

PHYSICIAN DISCUSSES PROPER HANDLING OF INJURIES TO BRAIN AND SKULL

The proper handling of brain and skull injuries resolves itself into three categories, the prevention of infection, the treatment of increased intracranial pressure and the proper management of depressed fractures, Bernard S. Brody, M.D., New Haven, Conn., points out in *The Journal of the American Medical Association* for Sept. 21.

"The dissemination of opinion concerning the treatment of cranial injuries," Dr. Brody declares, "is important because the automobile has increased enormously the number of such patients for physicians in out of the way places where the services of a neurosurgeon are not readily available."

Statistics show that the majority of patients recover with ordinary bed rest supplemented in some instances by spinal puncture to relieve the intracranial pressure, the doctor says. Those patients with an uncomplicated concussion should be kept in bed for approximately from ten to fourteen days. X-rays of the skull, when needed for medicolegal reasons or otherwise, can be taken when the patient's condition warrants the effort.

A diagnostic spinal puncture should be done at some time within the first week. Any small amount of bleeding which might have been present may be missed after seven days. For patients whose spinal fluid is bloody or whose period of unconsciousness is prolonged, the diagnosis of simple concussion alone is no longer tenable and the period of bed rest must be proportionately longer.

COME TO FRENCH LICK
OCTOBER 29, 30 and 31
See Page 535



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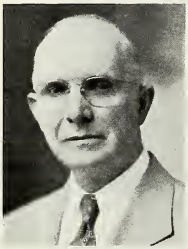
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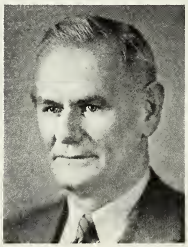
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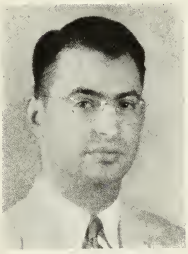
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Come to French Lick





Golf, horseback riding, skeet and trapshooting, swimming and numerous other sprots are available at French Lick.

Indiana State Medical Association officers and committee members are completing plans for their annual meeting at French Lick Springs, world famous spa in Southern Indiana. The meeting will be in session October 29 to 31.

Nestled in the Cumberland foothills, the renowned resort has for generations been the favorite of thousands of sports fans, health seekers, convention guests and vacationists each year. The spa is a community in itself, with all the conveniences that total gracious living.

The spa is a popular convention site, for with the exception of outdoor sports, all activity centers under one roof. Guests need not venture beyond the hotel for their daily requirements. Barber and beauty shops, drug store, men's clothing store, gift shop, telegraph and telephone offices are all located in the main hotel section. A physician supervises the health baths and a registered nurse is a resident member of the staff.

One wing of the hotel is devoted exclusively to convention use with private guest rooms, convention hall and display quarters. A public address system is in the main auditorium which is equipped with a stage and property for use of speakers or for entertainment.

Golf is the top sports diversion, with the resort maintaining two eighteen-hole courses. The Valley course is located only a scant 150 yards from the main hotel entrance and is popular with those desiring a not-too-strenuous game. The Hill course, in contrast, presents a tough, fast game that is skill-provoking even for expert players. The layout is annually the scene of major golf tournaments. Mel Smith, one of the nation's foremost golf instructors, is the resident pro. The Hill course has a new $75,000 clubhouse embodying all the latest features for golfers' enjoyment. Both clubhouses stock a complete line of golfing equipment and clubs are also available on a rental basis.

Popular also are skeet and trapshooting. Phil Miller, long a top ranking amateur, and captain of the 1939 All-American Trapshooting team, is manager of the gun club. Miller has captured every major trapshooting title at one time or another in his years of competition at the Grand American, the Kentucky Derby of trapshooting. He serves as an instructor at the gun club without charge.

Horseback riding over the spa's miles of bridle paths is always a favored activity. A stable of blooded Kentucky saddle horses is maintained and expert grooms are available either for instruction or as guides.

Men's and women's swimming pools, tennis, archery, pitch and putt golf, badminton, ping-pong and horseshoe pitching are among the other diversions in the sports line.

Modern mineral baths and massage treatments are available at French Lick Springs at reasonable rates. Waters from the famous Pluto spring are served at any desired temperature.

A spacious veranda extends the entire length of the main hotel section and the resort's parks and nature trails and Formal and Japanese gardens are popular spots.

The hotel operates on the American plan with rates including meals. A Swiss chef has made the cuisine renowned.

French Lick Springs is easily reached by rail, air or motor.

Official Program

91st Annual Session
INDIANA STATE MEDICAL ASSOCIATION
French Lick Springs Hotel
French Lick, Indiana

OCTOBER 29, 30 AND 31, 1940

(Schedule will be carried out on Central Standard Time)

Monday, October 28, 1940

Meeting of state health officers.

6:30 p.m. Executive Committee dinner and meeting, Parlor B, main floor, French Lick Springs Hotel.

Tuesday, October 29, 1940

Morning

8:00 a.m. Registration starts, north porch, off main lobby, French Lick Springs Hotel.

8:00 a.m. Opening of commercial exhibit, main lobby and north porch, French Lick Springs Hotel.

9:00 a.m. Annual golf tournament. Eighteen holes, low gross and handicap medal play. Hill and Valley Courses, French Lick Springs. Fee, $1.00.

Afternoon

12:15 p.m. Golfers' luncheon, Hill Course Club House, French Lick Springs.

12.30 p.m. Council meeting, Blue Room, French Lick Springs Hotel.

1:00 p.m. Annual trap shoot, French Lick Springs Trap and Skeet Club.

4:00 p.m. Meeting of House of Delegates, Convention Hall, French Lick Springs Hotel.

Fred W. Rankin, M.D., Lexington, Kentucky, Medical Director, Fifth Corps Area. (10 minutes.)

Evening

6:30 p.m. Annual dinner meeting for women physicians, Blue Room, French Lick Springs Hotel.

7:00 p.m. Barbecue supper, smoker and stag party, French Lick Springs Hotel.

Award of golf and trap shooting prizes.

10:00 to **12:00** p.m. Informal dancing, main lobby, French Lick Springs Hotel. Cards, mezzanine floor, French Lick Springs Hotel.

Wednesday, October 30, 1940

Morning

A.M.

7:30 Breakfast meeting of members of Conservation of Vision County Committees, Blue Room, French Lick Springs Hotel. Round table discussion led by C. W. Rutherford, M.D., Indianapolis.

8:00 Registration continues, north porch, off main lobby, French Lick Springs Hotel.

8.00 Commercial exhibits, main lobby and north porch, French Lick Springs Hotel.

GENERAL MEETING

Main Convention Hall, French Lick Springs Hotel

9:00 Call to order by Karl R. Ruddell, M.D., Indianapolis, president, Indiana State Medical Association.

Greetings and introduction of C. E. Boyd, M.D., West Baden, president of Orange County Medical Society, and of C. E. Briscoe, M.D., New Albany, president of the Third District Medical Society, by George Dillinger, M.D., chairman of Committee on Convention Arrangements.

Official welcome to visiting physicians by Orange County and Third District Medical Societies.

9:10 President's address, Karl R. Ruddell, M.D., Indianapolis.

Scientific Program

A.M.

9:30 **ROY WESLEY SCOTT, M.D., Cleveland, Ohio**
Subject: ***CLINICAL ASPECTS OF ARTERIOSCLEROSIS***

ABSTRACT: Clinical experience and statistics from many sources show the steadily mounting incidence of vascular disease which, at present, is responsible for more than twice as many deaths as any other disease. Arterial decay is the chief barrier to longevity and the major factor determining individual expectancy; therefore, arteriosclerosis is one of the most important problems with which the present day practitioner must deal. Excluding instances of peripheral vascular disease, the symptomatology, clinical picture and ultimate course

Guest Speakers



J. S. Coulter, M.D.
Asso. Prof. Physical Therapy, Northwestern Univ. Medical School Chicago



N. J. Eastman, M.D.
Prof. Obstetrics, Johns Hopkins Univ. Sch. of Medicine, Baltimore



J. M. Hayman, M.D.
Assoc. Prof. Medicine, West. Reserve Univ. Sch. Med., Cleveland



Irvin Abell, M.D.
Clinical Prof. Surgery, Univ. of Louisville School of Medicine, Louisville, Ky.



E. A. Rovenstine, M.D.
Prof. of Anesthesia, N. Y. Univ. College of Medicine, New York



R. R. Mellon, M.D.
Director, Institute of Pathology, Mellon Institute of Industrial Research, Pittsburgh



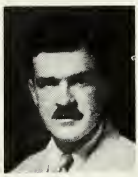
A. H. Wood, M.D.
Baltimore, Md.



Roy W. Scott, M.D.
Prof. Clin. Medicine West. Reserve Univ. Cleveland



N. C. LaMar, M.D.
Associate Attending Psychiatrist Society of the N. Y. Hospital New York



C. A. Flood, M.D.
New York



Fred Rankin, M.D.
Med. Dir. 5th Corps Area, Lexington, Ky.



F. H. Lahey, M.D.
Pres.-Elect, American Med. Assn., Boston Banquet Speaker



C. Walter McCarty
Managing Editor, Indianapolis News Banquet Speaker



Lt.-Col. R. Hitchcock
Exec. Officer, Adj. General's Office, State of Indiana, Indianapolis



Mrs. George Dillinger
In charge of Women's Entertainment French Lick



Mrs. V. E. Holcombe
Pres. of Wom. Aux., Amer. Medical Assn. Charleston, W. Va. Speaker for Woman's Auxiliary

Wednesday, October 30

A.M.

observed in the majority of patients vary widely depending upon which of three vital vascular beds are affected—heart, brain and kidneys. Thus such important and varied clinical entities as angina pectoris and coronary occlusion, cerebral hemorrhage and thrombosis, hypertension ending in heart failure or the malignant form with uremic death, are all in the final analysis different manifestations of vascular decay. A correlation of the anatomical and more common clinical aspects of arteriosclerosis from the practitioner's standpoint is the aim of this paper.

10:15 CHARLES A. FLOOD, M.D., New York

Subject: *PROGNOSIS AND TREATMENT IN PEPTIC ULCER*

ABSTRACT: Inasmuch as peptic ulcer is a disease of unknown etiology, treatment is largely empirical. There is general agreement that uncomplicated cases should be cared for on a medical regimen and that surgery should be reserved for cases with complications. More than 20 years ago a follow-up clinic was established at the Presbyterian Hospital in New York for the study of the natural history of peptic ulcer. In the medically treated patients recurrence of symptoms takes place in the majority within a few years. In most cases, however, the recurrences have been mild and readily controlled. Certain types of case have a poor prognosis, namely, patients with persistent pain in spite of a rigid medical regimen, patients who have suffered from more than two gross hemorrhages and patients with persistent pyloric obstruction. Surgery should be contemplated for such cases.

The results of surgery have been satisfactory when subtotal gastrectomy was performed. This procedure carries a high mortality rate, however, unless performed by a highly experienced surgeon. Gastroenterostomy should be reserved for cases with persistent pyloric obstruction.

11:00 NORVELLE CHAPPELL LA MAR, M.D., New York

Subject: *COMMON PHYSICAL DISORDERS OF CHILDHOOD*

ABSTRACT: Symptoms and physical manifestations are more common than are physical diseases in childhood. The secondary gain (advantages) of physical disease can be a stubborn, complicating factor in convalescence. Recognition of the causes underlying both aspects of childhood disorders facilitates diagnosis and treatment, as well as the application of prophylactic measures. Conflicting forces, either within the child's personality or between the child and his outer environment, together with his congenital equipment, constitute the causes of a majority of common physical disorders. Smooth muscle, glandular, vasomotor, secretory and metabolic mechanisms participate in the psychosomatic expressions of conflict and represent symptoms, but not necessarily physical disease. A broad background, which includes the attitudes of various societies toward children and their expectations of child behavior, the psychological tendency in education, established clinical data and illustrative examples, will be presented with a view of orienting physicians of children toward useful, practical concepts and approaches in a confused but promising field of medical operation.

Noon

P.M.

12:30 Fraternity, class and ex-service men's luncheons and get-togethers:

National Defense luncheon, main dining room, French Lick Springs Hotel. (Everyone invited.) Tables will be reserved for fraternities, classes and special groups.

Speaker: LIEUTENANT-COLONEL ROBINSON HITCHCOCK

Subject: *THE PHYSICIAN'S PLACE IN THE PREPAREDNESS PROGRAM*

Wednesday, October 30

P.M.

Luncheon of Indiana Roentgen Society, Radio Room, mezzanine floor.

Regional Fracture Committee luncheon, Parlor B, main floor.

12.30 Luncheon of Section on Anesthesia, Game Room, mezzanine floor.

Afternoon

SECTION MEETINGS

MEDICAL SECTION

Chairman, W. L. Portteus, M.D., Franklin
Vice-chairman, John Warvel, M.D., Indianapolis
Secretary, James E. McMeel, M.D., South Bend

(MAIN CONVENTION HALL)

2:00 M. H. DRAPER, M.D., Fort Wayne

Subject: *MODERN METHODS OF TREATMENT OF PULMONARY TUBERCULOSIS*

ABSTRACT: Tuberculosis is one of the oldest diseases that has confronted the physician. There was no particular method of attack until about two and one-half decades ago; no special effort was made in the control of this disease until after the establishment of the National Tuberculosis Association.

Rest is the fundamental in treatment of tuberculosis. Anything that is mentioned here must be kept in mind and considered to be supplemental to rest.

Surgery since the advent of the last war has developed a special line of attack for the tuberculous. In addition to rest, there are some special short-cuts in treatment such as artificial pneumothorax, several phrenic operations, apicolysis, pneumolysis, thoracoplasty, lobectomy, and pneumonectomy.

Tuberculosis still needs our attention; it causes more deaths between the ages of 15 and 40 than any other known disease.

Slides will be used for illustration.

2:20 H. H. RODIN, M.D., South Bend

Subject: *SOME COMMON DERMATOSES SEEN BY THE GENERAL PRACTITIONER*

ABSTRACT: Observations made at skin clinics of Cook County Hospital reveal dermatitis venenata, infectious eczematoid dermatitis and dermatophytosis, with associated "id" eruptions, as some of the more common dermatoses seen by the general practitioner. These will be discussed from the standpoint of mismanagement and general therapeutic principles. Chronic lupus erythematosus, although not frequently encountered, will also be included because of the serious complications observed from improper treatment.

2:40 RALPH U. LESER, M.D., Indianapolis

Subject: *AGRANULOCYTIC ANGINA*

ABSTRACT: Agranulocytic angina is defined as an acute disease characterized by extreme leukopenia and granulopenia. There are no, or at most extremely few, immature white cells in the blood at the height of the disease. Insidiousness of onset is frequent, with depression of white cells often preceding the onset of symptoms by a number of days. Early symptoms may be headache, general malaise, and chills, while later manifestations are marked pyrexia, pharyngitis, and ulcerations of the mouth and throat. Death may occur within thirty-six hours of the apparent onset. Among the etiological factors are thought to be amidopyrine, dinitrophenol, arsenic, sulfanilamide, sulfapyridine, and related compounds. Death has occurred frequently enough that the use of the first two drugs should be interdicted, and that of the latter two should be undertaken only while total and differential blood counts are being performed. Therapy, especially with pentnucleotides, is discussed.

3:00 ELECTION OF SECTION OFFICERS

Wednesday, October 30

P.M.

3:15 EDMUND L. KEENEY, M.D., Baltimore

Subject: ***THE THEORY AND PRACTICE OF THERAPEUTICS IN ALLERGY***

ABSTRACT: The two basic components of the allergic reaction are capillary permeability with interstitial edema and smooth muscle spasm. Therapy in allergy, therefore, must be directed toward the correction of these two physiological phenomena. Following such basic principles the treatment of hay fever with air-conditioning, histaminase, and potassium salts will be discussed. The use of epinephrine hydrochloride, epinephrine in oil, -aminophyllin, sucrose, helium, oxygen, histamine, and sulfapyridine in the treatment of bronchial asthma will be considered. A comparison will be made of the effectiveness of a new poison ivy extract with the various commercial preparations available for the immunological treatment of poison ivy dermatitis. These latter results, for the most part, have been obtained recently from a survey conducted under the auspices of the Baltimore City Health Department.

4:00 WILLIAM A. SHUCK, M.D., Madison

Subject: ***SOME COMMON COMPLICATIONS OF PREGNANCY AND THEIR TREATMENT***

ABSTRACT: In this paper an attempt will be made to discuss cardinal points of diagnosis and treatment of the more common complications of pregnancy. This subject is so large that a detailed discussion is not practical. A brief outline is as follows: I. Diseases of the mother: (a) Diseases incidental to pregnancy; (b) Diseases accidental to pregnancy. II. Diseases of the ovum: (a) The membrane.

4:20 CURTIS R. HOFFMAN, M.D., Richmond

Subject: ***IMMUNIZATION PROGRAM FOR THE CHILD OF PRE-SCHOOL AGE***

I. Importance of Breast Feeding from Immunological Standpoint: Question as to so-called "immune bodies" in human milk but animal experimentation proves such.

II. The Role of the General Medical Doctor: Most deliveries and most infants are taken care of by general medical man and he should have clear cut conception of principals of immunity and the immunizable diseases, then give early and proper advice regarding these.

III. Immunizable Diseases. (1) Whooping Cough: Sauer's Vaccine 1½ cc. for three doses at weekly intervals, beginning at six to seven months. (2) Diphtheria: Toxoid two or three doses at 3-week intervals, before end of first year. (3) Smallpox: Vaccination before kindergarten. (4) Scarlet Fever: Not in general use.

4:40 HAROLD F. DUNLAP, M.D., Indianapolis

Subject: ***THE CLINICAL SIGNIFICANCE AND TREATMENT OF STATES ASSOCIATED WITH LOW BASAL METABOLIC RATES***

ABSTRACT: Cases of primary hypothyroidism or myxoedema comprise one distinct group. Failure of normal thyroid function results in the production of certain characteristic physical changes which occur when the basal metabolic rate falls to below a level of -18 percent. Treatment consists in replacement therapy by the administration of thyroid substance. Clinical manifestations are abolished by adequate treatment.

Cases of secondary hypothyroidism or preferably cases of hypometabolism without myxoedema comprise a heterogenous group characterized merely by the fact that they have in common a low basal metabolic rate. Although this group manifests some of the signs of hypothyroidism, yet these cases never show the characteristic physical changes occurring in myxoedema. The administration of thyroid substance may elevate the basal metabolic rate and result in some improvement. However, therapy is never as satisfactory as in myxoedema.

Wednesday, October 30

SURGICAL SECTION

Chairman, W. C. Wright, M.D., Fort Wayne

Vice-chairman, J. H. Clevenger, M.D., Muncie

Secretary, Arnold Duemling, M.D., Fort Wayne

(NORTH CONVENTION HALL)

P.M.

2:00 WILLIAM DONALD DAVIDSON, M.D., Evansville

Subject: ***THE TREATMENT OF BUMPER FRACTURES***

ABSTRACT: Bumper fractures are comminuted, often compounded, fractures of both bones of the lower leg near the junction of upper and middle thirds, the level at which an automobile bumper strikes a pedestrian. The compounded type may present an extensive skin defect caused by the vertical guard of the bumper. The non-compounded type is accompanied by a massive hematoma which may interfere with the circulation. The damage to the soft tissues must be considered in selecting the form of treatment to be followed. The compound fractures require immediate operation and prophylaxis against infection. Satisfactory immobilization of the fragments is difficult to obtain due to the extensive comminution present. Fixed skeletal traction and counter-traction combined with a special plaster technic has been found to give the best results.

2:20 Discussion by F. E. Hagie, M.D., Richmond.

2:30 R. L. HANE, M.D., Fort Wayne

Subject: ***RECURRENT HYPERTHYROIDISM***

ABSTRACT: In diseases of unknown etiology, something less than perfection is anticipated in any form of treatment. That recurrent manifestations of hyperthyroidism do occasionally occur after surgical treatment cannot be doubted, yet this is insufficient basis for condemning the procedures employed.

Careful definition need be made so that those cases exhibiting persistent symptoms after operation should not be considered as true recurrences. While secondary operations are at times necessary for nodular or adenomatous goiters, the problem of recurrent hyperthyroidism is largely concerned with the diffusely hyperplastic gland or exophthalmic goiter.

Any discussion of etiological factors must include, besides the possibility of inadequate surgery, insufficient and improper postoperative care, infection, pregnancy, menopause, fatigue, and poorly adapted environmental factors.

A review of literature shows considerable variation in incidence of recurrent hyperthyroidism in the experience of various authors. A study of goiter surgery at St. Joseph Hospital, Ft. Wayne, is presented. The importance of postoperative management is emphasized.

2:50 Discussion by J. R. Yung, M.D., Terre Haute.

3:00 FRANK B. RAMSEY, M.D., Indianapolis

Subject: ***CARCINOMA OF THE COLON AND RECTUM***

ABSTRACT: Carcinoma of the colon and rectum are lesions which can be diagnosed early in their development and can be cured more often than any of the other common types of malignancy. The diagnosis of carcinoma in various portions of the large bowel will be discussed and illustrated by lantern slides. A resume of the results of radical surgical treatment will be presented and the surgical principles involved will be discussed.

3:20 Discussion by W. H. Baker, M.D., South Bend.

Wednesday, October 30

P.M.

3:30 W. H. HOWARD, M.D., Hammond

Subject: *OFFICE MANAGEMENT OF PELVIC DISEASES*

ABSTRACT: This paper will deal with many of the common gynecological complaints common in an office where the physician sees many women patients. Most common is leukorrhea due to endocervicitis from gonorrhea and infections following childbirth; then trichomonas, senile vaginitis, and the fungus infections associated with diabetic vulvar vaginitis. Treatment will be discussed. Another group is dysmenorrhea due to malpositions of the uterus, stenosis of the cervix, and endocrine disturbances. Sterility is encountered often and frequently can be relieved by local treatments in the office. Pruritis vulvae is seen frequently and is associated with trichomonas, leukorrhea (senile type), diabetes—and we must not forget the pubic lice.

3:50 Discussion by C. O. McCormick, M.D., Indianapolis.

4:00 AUSTIN H. WOOD, M.D., Baltimore, Md.

Subject: *CLINICAL UROLOGY (Motion Pictures in Technicolor)*

ABSTRACT: First film: Giant Vesical Calculus, Suprapubic Cysto-lithotomy.

Second Film: Prostatic Calculi, Perineal Prostatolithotomy.

Third Film: Nephrectomy for Tumor with Resection of the Twelfth Rib.

4:30 ELECTION OF SECTION OFFICERS

SECTION ON OPHTHAMOLOGY AND OTOLARYNGOLOGY

Chairman, B. W. Egan, M.D., Logansport
Vice-chairman, Donald Dean, M.D., Rushville
Secretary, R. M. Dearmin, M.D., Indianapolis

(SOUTH FOYER OF THE CONVENTION HALL)

P.M.

2:00 DAVID A. BOYD, Jr., M.D., Indianapolis

Subject: *DELIRIUM ASSOCIATED WITH CATARACT EXTRACTION*

ABSTRACT: In 2½ to 3% of patients undergoing cataract extraction, a psychosis complicates the postoperative course. This mental disorder is usually either a delirious reaction or a senile dementia. The mental disturbance is usually severe in degree and threatens the success of the operation, future mental health of the patient and sometimes is the direct cause of a fatal outcome. The etiology, symptomatology, differential diagnosis and the course of these complicating mental disorders are discussed. The careful treatment of these psychological disturbances, when they occur, is of utmost importance. A careful selection of patients is indicated as well as an effort to avoid any factors liable to precipitate a mental disorder in a patient who appears emotionally unstable.

2:30 Discussion

2:45 LYMAN T. MEIKS, M.D., Indianapolis

Subject: *THE INFLUENCE OF TONSILECTOMY ON THE PROGRESS OF RHEUMATIC HEART DISEASE*

ABSTRACT: Review of the present knowledge of etiology of rheumatic fever with special reference to the relation of throat infections to exacerbations of the disease. Discussion of the importance of exacerbations on extent of heart damage and occurrence of heart failure in children. Effect of tonsillectomy in preventing or in precipitating an exacerbation. Optimum time for operation.

3:15 Discussion

Wednesday, October 30

P.M.

3:30 E. O. ALVIS, M.D., Indianapolis

Subject: *THE EYE IN INDUSTRY*

ABSTRACT: The most frequent eye injury in industry is the corneal injury. This may be from foreign bodies, burns, lacerations or penetrations. It is very important to consider even the most trivial corneal injury as serious because neglect of a small foreign body lodged in a cornea often results in marked impairment of vision. The most frequent devastating cause of high loss of vision is the foreign body resulting from the use of hand tools such as the hammer used upon a chisel or punch. The incidence of penetrating wounds is much greater from hand tools than from machine-operated tools. It is paramount to stress the fact that neglect of adequate immediate first aid often results disastrously.

4:00 Discussion

4:15 RALPH R. MELLON, M.D., Pittsburgh, Pa.

Subject: *SULFATHIAZOLE, THE MOST COMPLETE SULFONAMIDE COMPOUND: ITS MODE OF ACTION*

ABSTRACT: Pertinent clinical and experimental evidence will be assembled in behalf of the concept that the drugs act by poisoning one or more of the enzymes on which highly virulent pneumococci and streptococci depend for their food supply. The starvation resulting brings about certain mutation-like changes in the germs, whereby their virulence is so impaired as to make them a ready prey for the phagocytes of the host. It will also be shown that unless the "natural resistance" powers of the host are relatively intact, the bacteriostatic effect of the drugs alone will usually not be sufficient to overcome the infection. These "natural resistance" forces are distinct from the antibodies, and their practical bearing on the recovery of the clinical case will be presented.

5:00 ELECTION OF SECTION OFFICERS

SECTION ON ANESTHESIA

Chairman, E. T. Zaring, M.D., Terre Haute
Vice-chairman, F. A. Thomas, M.D., Indianapolis
Secretary, Lillian B. Mueller, M.D., Indianapolis

(GAME ROOM, MEZZANINE FLOOR)

P.M.

12:30 Luncheon in honor of E. A. Rovenstine, M.D., New York

2:00 W. B. ADAMS, M.D., Indianapolis

Subject: *A YEAR OF ANESTHESIA AT INDIANAPOLIS CITY HOSPITAL*

ABSTRACT: Until some months ago, two physicians devoted part time to the management of anesthesia at Indianapolis City Hospital. On August 1, 1939, a full time physician anesthetist took charge. This paper presents the resulting changes in organization and function of the department; charts the statistics, and gives a brief analysis thereof. An outline of projected development concludes the paper.

2:20 Discussion by John M. Whitehead, M.D., Indianapolis

2:30 E. A. ROVENSTINE, M.D., New York

Subject: *CIRCULATORY DISTURBANCES DURING ANESTHESIA*

ABSTRACT: Until the last few years the anesthetist gave little attention to cardiovascular phenomena, other

Wednesday, October 30

than shock, that occur frequently during anesthesia in man. Advances in the physiology and pharmacology of circulation have aided in clarifying some of the admittedly complex disturbances in circulation that have defied explanation until recently. The mechanism and significance of certain of these phenomena will be discussed with illustrative case reports.

Circulatory depression during spinal anesthesia, the effects of traction reflexes, the carotid sinus mechanism, cardiac arrhythmias, and vagal stimulation are among the cardiovascular disturbances discussed. The prophylaxis and treatment for these untoward reactions are included.

3:30 Discussion by Charles N. Combs, M.D., Terre Haute

3:40 FLOYD T. ROMBERGER, M.D., Lafayette

Subject: Lantern slide demonstration on *THE FLAMMABILITY OF ANESTHETIC AGENTS*

Discussion by E. A. Rovenstine, M.D., New York.

4:10 ELECTION OF SECTION OFFICERS

Annual Banquet

Wednesday Evening, October 30, 1940

7:15 p.m. Annual banquet, main dining room, French Lick Springs Hotel.

Presiding officer, Karl R. Ruddell, M.D., president, Indiana State Medical Association.

Presentation of certificate of merit to E. M. VanBuskirk, M.D., president 1939, Indiana State Medical Association, by Karl R. Ruddell, M.D.

Speakers: FRANK H. LAHEY, M.D., Boston, Massachusetts, president-elect, American Medical Association.

Subject: (To be announced.)

WALTER McCARTY, Indianapolis, Managing Editor, The Indianapolis News.

Subject: *JOURNALISTIC OBSTETRICS*

10:30 p.m. to **1:00** a.m. President's reception and ball, convention hall, French Lick Springs Hotel.

Thursday, October 31, 1940

A.M.

7:00 House of Delegates breakfast meeting, West Room, French Lick Springs Hotel. Annual election of officers and selection of convention city for 1941.

Meeting of Council immediately following adjournment of House of Delegates.

Thursday, October 31

GENERAL MEETING

Main Convention Hall, French Lick Springs Hotel

A.M.

9:30 JOSEPH M. HAYMAN, M.D., Cleveland, Ohio

Subject: *THE DIAGNOSIS AND TREATMENT OF ACUTE NEPHRITIS*

ABSTRACT: Acute nephritis is an allergic reaction which follows a small proportion of infections. It is most common after infections due to hemolytic streptococcus. The cardinal symptoms of hematuria, hypertension, and edema are not present in all cases. The disease is not limited to the kidneys for evidence of cardiac involvement is present in approximately one-half the cases. Once complete recovery has occurred, the patient usually remains well. However, since in a significant proportion of cases the disease progresses, with the development of chronic nephritis, even apparently mild attacks must be regarded as serious and every effort made to bring about complete healing in the first attack.

10:00 IRVIN ABELL, M.D., Louisville, Kentucky

Subject: *DIAGNOSTIC SIGNIFICANCE OF PAIN IN THE ABDOMEN*

ABSTRACT: Brief discussion of the value of pain in the diagnosis of both acute surgical lesions and of medical lesions of the abdomen.

Second; consideration of the theories of the method of production of pain in the acute surgical lesions; the visceral and somatic pain; direct and reflex pain. Physiological explanation of reflex pain and its value as a diagnostic symptom. Brief explanation of pain in appendicitis, in peptic ulcer and cholecystitis and in intestinal obstruction.

10:30 NICHOLSON J. EASTMAN, M.D., Baltimore, Md.

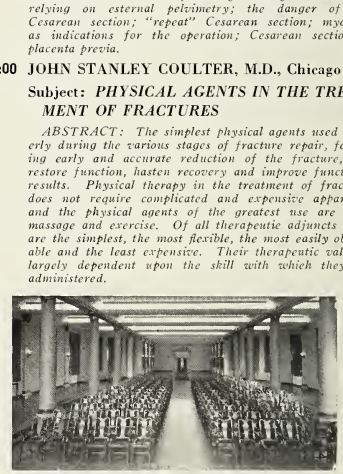
Subject: *INDICATIONS FOR CESAREAN SECTION*

ABSTRACT: During the past quarter of a century the incidence of Cesarean section in the maternity hospitals of the United States has increased five-fold. The maternal death rate the country over is about 4 per cent. These circumstances make it desirable to evaluate carefully indications and contra-indications to the operation. These are discussed under the following headings: Fallacy of relying on external pelvimetry; the danger of late Cesarean section; "repeat" Cesarean section; myomata as indications for the operation; Cesarean section in placenta previa.

11:00 JOHN STANLEY COULTER, M.D., Chicago

Subject: *PHYSICAL AGENTS IN THE TREATMENT OF FRACTURES*

ABSTRACT: The simplest physical agents used properly during the various stages of fracture repair, following early and accurate reduction of the fracture, will restore function, hasten recovery and improve functional results. Physical therapy in the treatment of fractures does not require complicated and expensive apparatus, and the physical agents of the greatest use are heat, massage and exercise. Of all therapeutic adjuncts these are the simplest, the most flexible, the most easily obtainable and the least expensive. Their therapeutic value is largely dependent upon the skill with which they are administered.



Convention Hall, French Lick Springs Hotel

Women's Entertainment

Tuesday, October 29, 1940

9:00 a. m. Registration, north porch, off main lobby, French Lick Springs Hotel.

9:00 a. m.-3:30 p. m. Open for sports. Golf and horseback riding available for those who choose; also tennis and badminton. (Inquire at registration desk about arrangements.)

3:30-5:00 p. m. Reception and musicale, honoring Mrs. William E. Tinney, state president, and the county auxiliary presidents, Japanese Garden, French Lick Springs Hotel. Floyd County Auxiliary presiding, Mrs. W. H. Garner, New Albany, president.

Ellen Gardner will present "Songs Befo' de Wah," a musical fantasy in costume by . singing artists well known to the concert and radio public of the Falls Cities in songs of the Old South and Plantation Days.

5:00 p. m. Board Meeting. Woman's Auxiliary to the Indiana State Medical Association, Radio Room, French Lick Springs Hotel.

7:00 p. m. Dinner party and entertainment, Main Dining Room, French Lick Springs Hotel.

"10,001 Health Questions." W. W. Bauer, M.D., Director of the Bureau of Health Education of the A.M.A.

"Ballet"—Mary Long Hanlon dancers, Louisville, Ky.

Informal dancing in lobby of hotel and cards on mezzanine floor following dinner.

Wednesday, October 30, 1940

8:15 a. m. Annual Auxiliary breakfast and business meeting, West dining room, French Lick Springs Hotel. Mrs. William E. Tinney, president, presiding.

Order of Business—Time will be called.

9:00 (1 min.) **Call to order**—Mrs. William E. Tinney, president

9:01 (3 min.) **Salute to the flag**

9:04 (3 min.) **Address of welcome**—Mrs. George R. Dillinger, French Lick

9:07 (2 min.) **Response**—Mrs. Fred B. Wishard, Pendleton

9:09 (5 min.) **In Memoriam**—Mrs. Maurice B. VanCleave, Terre Haute

9:14 (5 min.) **Song**—Mrs. John W. Emhardt, Indianapolis

9:19 (5 min.) **Introduction of Mrs. V. E. Holcombe,** West Virginia, National President

9:24 (6 min.) **Roll Call**—Mrs. E. M. VanBuskirk, Fort Wayne, Credentials Chairman

9:30 (2 min.) **Presenting agenda for approval**

9:32 (5 min.) **President's Message**—President

9:37 (10 min.) **Reports of elected officers:**
Secretary, Mrs. Harry Helmen, South Bend
Treasurer, Mrs. C. V. Rozelle, Anderson
Auditor, Mrs. C. L. Bock, Muncie, Chairman
Corresponding Secretary, Mrs. Byron K. Rust, Indianapolis
Parliamentarian, Mrs. C. F. Voyles, Indianapolis

9:47 (10 min.) **History**—Mrs. U. G. Poland, Muncie

9:57 (10 min.) **Introduction of County Presidents**—Mrs. F. B. Wishard, Organization Chairman

10:07 (8 min.) **Report of National Convention**—Mrs. C. N. Combs, Terre Haute, delegate

10:15 (2 min.) **Unfinished business**

10:17 (15 min.) **New Business**
Present resolutions—Mrs. C. F. Voyles, chairman
Budget Committee report—Mrs. C. V. Rozelle, chairman

10:32 (60 min.) **Opportunities**—A panel discussion by state chairmen. (Arranged by Mrs. E. N. Mendenhall, Fort Wayne, Program Chairman.)

Discussion and questions

Mesdames: G. W. Seward, North Manchester; J. W. Emhardt, Indianapolis; V. K. Harvey, Indianapolis; F. B. Wishard, Pendleton; E. N. Mendenhall, Fort Wayne; C. C. Taylor, Indianapolis; J. W. Baxter, New Albany; O. G. Pfaff, Indianapolis.

11:32 (3 min.) **Report of Nominating Committee**—Mrs. M. B. VanCleave, Chairman

11:35 (5 min.) **Election of officers**

11:40 (10 min.) **Installation of officers**—Mrs. C. F. Voyles

11:50 **President's response**
New business
State project (Recommendation by Executive Board)
Adjournment
Post-convention Board meeting immediately following adjournment

12:00 noon Meeting of past state presidents in room 142

12:00 noon Assemble on front porch of hotel for cars to Country Club.

12:30 p. m. Luncheon, honoring Mrs. V. E. Holcombe, Charleston, West Virginia, National President, Country Club
Address by Mrs. Holcombe

2:00 p. m. Cars leave for Spring Mill State Park

2:45-4:30 p. m. Motor trip through Park followed by guided tour through restored village

4:30-5:30 p. m. Tea Spring Mill Inn. Lawrence County women presiding

7:15 p. m. Annual banquet, Main dining room, French Lick Springs Hotel
Speakers—
Frank H. Lahey, M.D., Boston, Massachusetts, President-elect, American Medical Association
Walter McCarty, Indianapolis, Managing Editor, The Indianapolis News

10:30 p. m.-1:00 a. m. President's reception and ball, Convention Hall, French Lick Springs Hotel

Thursday, October 31, 1940

10:00-12:00 a. m. Informal bridge and farewell get-together—Mezzanine floor, French Lick Springs Hotel.

Women Guests at the Convention: Please Register Immediately Upon Arrival at the Registration Desk.

Trap Shoot

Program for the trap and skeet shoot will be as follows:

TRAP

1. 100—16 yard targets.
 Classes A, B, C, and D.
2. 50—handicap targets. The scores on the first 25 targets to determine the handicap yardage on the second targets. The total score of the two events will determine the winners.

SKEET

1. First event 25 targets.
 Classes A, B, and C.
2. Second event 25 targets. All of those competing will be given 75 per cent of the targets missed as a handicap for the shooting of this 25 targets.

This event will be held at the French Lick Springs Trap and Skeet Club at one o'clock in the afternoon of Tuesday, October twenty-ninth. No shooter can win more than two prizes.

R. B. SMALLWOOD, M.D.
L. A. ENSMINGER, M.D.

Announcements

ANTI-TUBERCULOSIS COMMITTEE

Members of the Anti-Tuberculosis Committee will hold a breakfast meeting, with round-table discussion of tuberculosis problems, Thursday, October thirty-first, at 8:00 a. m.

INDIANA ASSOCIATION OF PATHOLOGISTS

The Indiana Association of Pathologists will meet Wednesday noon, October thirtieth. Dr. H. C. Thornton of Indianapolis is secretary of the Association. There will be a table reserved for this group in the main dining room of hte French Lick Springs Hotel.

BE SURE TO BRING YOUR MEMBERSHIP CARD AND REGISTER IMMEDIATELY UPON ARRIVAL.

ALUMNI OF IU CLASS OF 1930

Members of the 1930 graduation class of the Indiana University School of Medicine are planning to hold their ten-year reunion during the session of the Indiana State Medical Association at French Lick on Wednesday, October thirtieth.

Secretaries Conference Committee will hold a breakfast meeting at French Lick Springs Hotel, Wednesday, October 30.

PHI BETA PI

Phi Beta Pi will hold an alumni luncheon Wednesday noon, October thirtieth. President of the alumni group is Dr. L. D. Bibler, Indianapolis; secretary-treasurer is Dr. M. S. Harding, Indianapolis.



Spring Mill Inn, Spring Mill State Park

OFFICIAL CALL TO THE HOUSE OF DELEGATES

The next annual session of the Indiana State Medical Association will be held at French Lick, October 29, 30 and 31, 1940.

The House of Delegates will be constituted as follows: Marion county, thirteen delegates; Lake county, five delegates; Allen county, three delegates; St. Joseph county, three delegates; Vanderburgh county, three delegates; Delaware-Blackford county, two delegates; Tippecanoe county, two delegates; Vigo county, two delegates; the other seventy-five county societies, each one delegate; thirteen councilors; the ex-presidents, namely: C. S. Bond, W. N. Wishard, Joseph R. Eastman, W. H. Stemm, C. H. McCully, W. R. Davidson, E. M. Shanklin, Charles N. Combs, Frank W. Cregor, George R. Daniels, Charles E. Gillespie, Angus C. McDonald, A. B. Graham, F. S. Crockett, J. H. Weinstein, E. E. Padgett, R. L. Sensenich, Herman M. Baker, and E. M. VanBuskirk. In addition to these, the president, secretary, and treasurer, all without power to vote except in case of a tie, when the president shall cast the deciding vote.

Blank credentials have been sent by the secretary to each county society, and the properly executed credentials should be mailed to Thomas A. Hendricks, 1021 Hume Mansur Building, Indianapolis, or brought to the session. No delegates will be seated unless wearing the official badge.

The House of Delegates will convene promptly at 4:00 p. m., Tuesday, October 29, in the convention hall of the French Lick Springs Hotel, and again at 7:00 a. m., Thursday morning, October 31 (unless otherwise designated by the House), in the West Room of the French Lick Springs Hotel (breakfast meeting).

The order of business will be as follows:

1. Call to order by the president.
2. Roll call and seating of qualified delegates.
3. Reading of the minutes of previous meetings.
4. Appointment of reference committees.
5. Report of executive secretary.
6. Report of the treasurer.
7. Report of the chairman of the council.
8. Reports of standing and special committees:
 - (1) Credentials.
 - (2) Executive.
 - (3) Arrangements.
 - (4) Scientific Work.
 - (5) Public Policy and Legislation.
 - (6) Bureau of Publicity.
 - (7) Civic and Industrial Relations.
 - (8) Medical Education and Hospitals.
 - (9) Public Relations.
 - (10) JOURNAL Publication.
 - (11) Necrology and Historian.
 - (12) Secretaries' Conference.
 - (13) Veterans' Affairs.
 - (14) Permanent Study Committee on Health Insurance and National Medical Situation.
 - (15) Study of High School Athletics.
 - (16) Mental Health.
 - (17) State Fair.
 - (18) Prevention of Traffic Accidents.
 - (19) State Board of Health Liaison Committee to Deal with Social Security Act.
 - (20) Sub-Committee to Study Maternal Morbidity and Mortality Rates for Indiana.
 - (21) Liaison Committee with Indiana Crippled Children's Bureau.
 - (22) Auditing.
 - (23) Control of Cancer.
 - (24) Venereal Disease.
 - (25) Industrial Health.
 - (26) Study of Cultists and Irregular Practitioners.
 - (27) Indiana Inter-Professional Health Council.
 - (28) Anti-Tuberculosis.
 - (29) Conservation of Vision.
 - (30) Pneumonia.
 - (31) Liaison Committee with Indiana State Department of Public Welfare.
 - (32) Director of Research on Sickness Insurance.
 - (33) M-Day Committee.
 - (34) Physical Therapy.
 - (35) Medical Relief.
9. Reading of communications.
10. Reading of memorials and resolutions.
11. Unfinished business.
12. New business.
13. Adjournment.

The election of officers will be the first order of business at the second meeting of the House of Delegates. In addition to the regular officers, the terms of the following officers expire December 31, 1940, and their successors must be elected at the session: Delegates to the American Medical Association to succeed H. G. Hamer, Indianapolis, and George Dillinger, French Lick, and alternates, W. F. Kelly, Indianapolis, and A. S. Giordano, South Bend.

Delegates from the third, sixth, ninth and twelfth districts are reminded that the terms of their councilors will expire December 31, 1940, and the new councilors should be elected to succeed the following:

Third District: W. H. Garner, New Albany.
Sixth District: Samuel Kennedy, Shelbyville.
Ninth District: F. T. Romberger, Lafayette.
Twelfth District: A. J. Sparks, Fort Wayne.

Some of these elections already may have been held but they should be reported to the House of Delegates at this session for confirmation.

Thomas A. Hendricks,
Executive Secretary.

REPORTS OF OFFICERS AND COMMITTEES

COMMITTEE ON CREDENTIALS

House of Delegates,
Indiana State Medical Association

Gentlemen:

In accordance with the Constitution and By-Laws of the Indiana State Medical Association, each county medical society must certify its delegates and alternates previous to the annual session of the state association. A postal card notification signed by the secretary of the local county medical society and sent to the headquarters office is sufficient certification. If you have not yet taken this action in your society, we urge that this be done immediately and that the headquarters office of this committee be notified.

Respectfully submitted,
W. F. CARVER, M.D., *Chairman*
J. W. BOWERS, M.D.
W. E. AMY, M.D.

EXECUTIVE SECRETARY

House of Delegates
Indiana State Medical Association

Gentlemen:

As this is written the future of the whole world is teetering in the balance and despite our most sincere desires and our utmost efforts we really can't do anything that will be very effective for many months yet to come.

As this is written the American Medical Association finds itself facing a government anti-trust suit which if it succeeds, some feel, will change the entire future practice of medicine.

As this is written the cultists are mobilizing for their greatest drive in a decade to destroy the high standards of medical education and practice in Indiana—a drive which is motivated by desperation due to the fact that at long last the public of this state has risen to protect itself against such pseudo-scientific practices as "etheronics" and "hot-hands healers" who have bilked the Indiana public of thousands of dollars each year.

So the picture looks pretty grim. So often, however, have we in the past come around to the annual session of the state medical association with the sincere feeling that the association and its members are facing a crisis which may rock the whole profession to its foundations that we hesitate to call attention to what may be in store in the next twelve months—even if we had any idea of what is going to happen. Often in the past have we warned of what might come, and somehow most of those things we have feared would happen have not happened so that we have been accused of being a joy-killer and calamity howler.

Irrespective of our poor batting average as a forecaster to date, we feel it is our duty to call your attention once again to the many serious problems and questions facing the profession and ask that the future be viewed realistically.

We know of no better way of obtaining a realistic view of the situation than by reading the annual reports of your officers and committees which are printed in this JOURNAL. To quote Carl Sandburg in the foreword of his great work on Abraham Lincoln, these reports "present events and thoughts that onrush side by side with cruel monotony and second and third readings bring out things not seen at first."

These reports are "abstracted from a record so voluminous and so changing that the complete story cannot be told, and suppose all could be told, it would take a far longer time to tell it than was taken to act it all in life."

Therefore, the committees have done the best they can and have picked out what is plain, moving and important, though sometimes what is important may be tough reading, tangled, involved.

So, if you take the time to read these reports, despite the ominous clouds overhead, we feel sure you will realize that all is far from lost—and that if a hard-working, energetic, active organization of enthusiastic members with high courage and morale means anything, then each of us can say with the same spirit that is moving the British, "Chins up, there will always be a medical profession."

Respectfully submitted,
THOMAS A. HENDRICKS,
Executive Secretary.

TREASURER

House of Delegates,
Indiana State Medical Association.

Gentlemen:

The accompanying report prepared by the George S. Olive and Company, certified public accountants, of Indianapolis, is quite comprehensive and, I believe, self-explanatory.

In March of this year $3,000.00 from the medical defense fund was invested in United States Savings bonds. These bonds bear no interest but will mature in ten years for $4,000.00. They are deposited with the medical defense holdings in the safety deposit box at the Indiana National Bank, Indianapolis, and they will be listed on the December 31, 1940, accountant's report.

Respectfully submitted,
A. F. WEYERBACHER, M.D., *Treasurer.*

EXHIBIT A

Indiana State Medical Association

ANALYSIS OF INCREASE IN ASSETS, ALL FUNDS
YEAR ENDED DECEMBER 31, 1939

Total assets, December 31, 1939—Exhibit B	**$51,349.24**
Total assets, December 31, 1938	**47,780.69**
Net increase	**$ 3,568.55**

Arising from the following sources:

Excess of operating cash receipts over operating cash disbursements — general fund, year ended December 31, 1939:		
Receipts—Exhibit C	$26,361.87	
Disbursements—Exhibit C	24,718.79	
Excess of operating receipts		$ 1,643.08
Excess of cash receipts over cash disbursements — medical defense fund, year ended December 31, 1939		1,846.00
Excess of cash receipts over cash disbursements—The Journal of the Indiana State Medical Association, year ended December 31, 1939		199.47
		$3,688.55
Less: Reduction of investment — Beachton Court Apartment bonds		120.00
Total net increase		$ 3,568.55

EXHIBIT B

STATEMENT OF ASSETS, ALL FUNDS, AT DECEMBER 31, 1939

General Fund:		
Cash on deposit—Exhibit C	$ 5,834.98	
Petty cash fund	200.00	
Investments:		
Fort Wayne, Indiana, school improvement bonds	3,000.00	
Indianapolis, Indiana, City Hospital bonds	5,000.00	
Marion County, Indiana, flood prevention bonds	3,000.00	
United States Treasury bonds	10,000.00	
Beachton Court Apartments, Chicago, bonds evidenced by certificate of deposit	3,680.00	
Rokeby Apartment Hotel, Chicago, bond evidenced by certificate of deposit	955.00	
Total general fund assets		$31,669.98
The Journal of the Indiana State Medical Association: Cash on deposit—Exhibit D		3,297.32
Medical Defense Fund:		
Cash on deposit—Exhibit E	$ 6,381.94	
Investments:		
Fort Wayne, Indiana, School Improvement bonds	2,000.00	
Indianapolis, Indiana, City Hospital bond	1,000.00	
Marion County, Indiana, flood prevention bonds	2,000.00	
United States Treasury bonds	5,000.00	
Total medical defense fund assets		$16,381.94
Total assets—all funds—Exhibit A		**$51,349.24**

EXHIBIT C

COMPARATIVE STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS, YEARS ENDED DECEMBER 31, 1939, AND DECEMBER 31, 1938

GENERAL FUND

	Year Ended Dec. 31, 1939	Dec. 31, 1938	Increase -Decrease
CASH BALANCE AT BEGINNING OF YEAR	$ 4,191.90	$ 4,066.69	$ 125.21
Receipts:			
Membership dues	21,471.00	21,253.00	218.00
Income from exhibits	4,022.12	4,267.88	—245.76
Rokeby Liquidation Trust Distribution		10.00	—10.00
Beachton Court Liquidation Trust Distribution	120.00	80.00	40.00
Interest income:			
United States Treasury bonds	286.25	286.25	
Indianapolis, Indiana, City Hospital bonds	200.00	200.00	
Marion County, Indiana, flood prevention bonds	127.50	127.50	
Fort Wayne, Indiana, school improvement bonds	135.00	135.00	
Total receipts	$26,361.87	$26,359.63	$2.24
BEGINNING BALANCE PLUS CASH RECEIPTS	$30,553.77	$30,426.32	$127.45
Disbursements:			
Transfers of applicable portion of dues of The Journal of the Indiana State Medical Association—Exhibit D	$6,246.00	$ 6,148.00	98.00
Medical defense fund—Exhibit E	2,283.75	2,265.75	18.00
Headquarters office expense	10,024.53	10,333.71	—309.18
Publicity committee	729.55	1,154.65	—425.10
Public policy	906.92	165.71	741.21
Council	208.04	528.59	—320.55
Officers	530.98	774.18	—243.20
Annual session	2,946.57	3,431.84	—585.27
Miscellaneous committees	692.16	794.00	—101.84
Postgraduate study	191.90	579.96	—388.06
Federal O.A.B. tax	58.39	58.03	.36
Total disbursements	$24,718.79	$26,234.42	—1,515.63
Cash balance at end of year (*Exhibit B*)	**$ 5,834.98**	**$ 4,191.90**	**$1,643.08**

EXHIBIT D

STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS
YEAR ENDED DECEMBER 31, 1939

THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION

BALANCE, JANUARY 1, 1939		$ 3,097.85
Receipts:		
Subscriptions—members—Exhibit C	$ 6,246.00	
Subscriptions—non-members	160.35	
Advertising	11,188.60	
Collections on accounts receivable	422.50	
Single copy sales	16.68	
Electrotypes	35.72	
Miscellaneous	2.00	
Total receipts		18,071.85
		$21,169.70
Disbursements:		
Editorial and management salaries	$ 7,764.80	
Printing	7,082.68	
Postage	718.71	
Electrotypes	465.54	
Office rent and light	736.52	
Office supplies	438.74	
Press clippings	125.93	
Federal O.A.B. tax	53.37	
Extra help	172.82	
Advertising commissions	261.85	
Copyright fees	24.72	
Bonding agency fees	20.00	
Miscellaneous	6.70	
Total disbursements		17,872.38
Balance, December 31, 1939—Exhibit B		**$ 3,297.32**

EXHIBIT E

STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS
YEAR ENDED DECEMBER 31, 1939

MEDICAL DEFENSE FUND

BALANCE, JANUARY 1, 1939		$ 4,535.94
Receipts:		
Transfer of applicable portion of dues from the genenral fund—Exhibit C	$ 2,283.75	
Interest income:		
United States Treasury bonds	155.00	
Indianapolis, Indiana, City Hospital bonds	47.50	
Marion County, Indiana, flood prevention bonds	85.00	
Fort Wayne, Indiana, school improvement bonds	90.00	
Total receipts		2,661.25
		$ 7,197.19
Disbursements:		
Attorney's retainer fee	$ 600.00	
Malpractice fees	200.00	
Treasurer's bond	15.00	
Miscellaneous	.25	
Total disbursements		815.25
Balance, December 31, 1939—Exhibit B		**$ 6,381.94**

REPORT OF THE CHAIRMAN OF THE COUNCIL

House of Delegates,
Indiana State Medical Association

Gentlemen:

As reports of the regular meetings of the Council of the Indiana State Medical Association held during the past year were published in the November 1939 and the February 1940 issues of THE JOURNAL, your chairman believes that a brief summary of the outstanding actions taken by the Council during the year will be sufficient at this time.

First Meeting, Fort Wayne, October 10, 1939

The Council convened at the Keenan Hotel at 12:45 p. m. with the chairman, Dr. M. A. Austin, of Anderson, presiding. The roll call showed twelve councilors, the president, president-elect, president 1938, treasurer, editor of THE JOURNAL, and the executive secretary present. In addition, members of the Executive Committee and chairmen of the legislative and convention arrangements committees were present.

Convention Innovations

Report was made of three outstanding innovations at the Fort Wayne session:

(1) The Hall of Health, sponsored by the Fort Wayne Medical Society;
(2) Physicians' hobby show;
(3) National broadcast by Dr. Nathan B. Van-Etten, president-elect of the American Medical Association.

Councilor District Reports

Councilor district reports as printed in the September, 1939, issue of THE JOURNAL were accepted.

Increase in State Dues

The Council recommended that the House of Delegates increase the state dues $3.00 a year, making a total of $10.00 a year for state association membership dues.

JOURNAL Printing Contract

Contract renewed with C. E. Pauley and Company, the present printers.

JOURNAL Elections

Dr. E. M. Shanklin was unanimously re-elected editor of THE JOURNAL for 1940, and Dr. Edmund L. VanBuskirk, of Lafayette, and Dr. James F. Balch, of Indianapolis, were elected to the editorial board. Hereafter the names of nominees for the editorial board are to be presented at the midwinter meeting of the Council in order that the councilors may know something about the men for whom they are to vote at the October meeting of the Council.

County Society Membership

The Council recommended that a change be made in the Constitution and By-Laws of the state association to require a physician to be "a legally licensed physician in the State of Indiana" and "that no county society accept a member who is not legally licensed in the State of Indiana."

Program for State Conference on Social Work

The Council approved the request that the Indiana State Medical Association supply the program during the two days of the forty-ninth annual meeting of the state conference on social work which was held in Indianapolis in November.

Resolution Concerning Joint County Medical Societies

The Council rejected the suggestion that the By-Laws of the state association be changed to allow joint county medical societies at least one delegate for each county.

Payment of Traveling Expenses of Committeemen Approved

The Council approved the recommendation that "the traveling expenses for all committees for special call meetings be paid and that this action be made retroactive for one year."

Change in Constitution and By-Laws

The Council recommended that Article II of the Constitution and Section 4, Chapter VII of the By-Laws be amended to eliminate the word "material" in each of these paragraphs.

Payment of All Expenses for Annual Session

The Council approved a resolution that hereafter the state association shall pay all expenses of the annual session without calling upon the medical society in whose locality the convention is held to finance any portion of the expenses, providing all estimated expenses shall be presented to the Council in a budget at the midwinter meeting of the Council preceding the annual session.

Second Meeting, Fort Wayne, October 12, 1939

The second meeting of the Council convened directly following the meeting of the House of Delegates with Dr. M. A. Austin, chairman, presiding, at the Anthony Hotel. Roll call showed eleven councilors, the president-elect, treasurer, chairman of the Executive Committee, attorney for the association and executive secretary present.

Amendment to Constitution

Through an oversight amendment to Section 3, Article IX, of the Constitution in regard to the eligibility of a member of the House of Delegates to an office in the state association was not printed in THE JOURNAL twice during 1939 and hence was not eligible for presentation to the House of Delegates at the 1939 meeting. The Council instructed

the secretary to see that this amendment would be eligible for presentation to the House of Delegates at the 1940 meeting.

Increase in State Association Dues Approved by Council

By individual voice vote the Council voted to accept the increase in dues passed by the House of Delegates, there being ten votes "yes," one vote "no," and two councilors absent.

Health and Accident Insurance Plan

Plan presented by Dr. L. W. Vore, of Plymouth, whereby the state medical association would organize an insurance company to write health and accident insurance for its members. Matter referred to the Permanent Study Committee on Health Insurance with the suggestion that Dr. Vore get in touch with the chairman of that committee.

Midwinter Meeting, Indianapolis, January 7, 1940

With ten councilors, the president-elect, editor of THE JOURNAL, and the executive secretary present, the Council convened at the Columbia Club, Indianapolis, with Dr. M. A. Austin, chairman, presiding. Two councilors were absent because of a snow storm.

Reports by Districts

Reports of councilors by districts showed that medical organization in each district was in good shape.

Reports of Officers

Treasurer's report presented showing that the association had operated with a net increase of $3,568.55 in 1939 over the balance at the end of 1938.

Traveling Expenses of Committeemen

Following action at the annual session approving the payment of traveling expenses of committee members, the Council set 3 cents a mile plus actual cost of hotel and meals as a basis for reimbursing members who travel by automobile, and actual railroad and Pullman fare for those traveling by train. The Council went on record that no committeeman's expenses shall be paid for attending committee meetings held during the annual session of the association.

Plans for 1940 Annual Session

Preliminary report, along with proposals and suggestions for the 1940 annual session to be held at French Lick, October 29, 30 and 31, 1940, presented and approved by the Council.

The Council approved an estimated budget of $850.00 for the expenses of the local committees at the annual session.

No Solicitation of Golf Prizes

The Council went on record against any solicitation of golf prizes. If any firms desire to donate prizes these prizes may be accepted providing the products of the companies wishing to give the prizes are approved by the Council on Pharmacy and Chemistry of the A. M. A.

No Scientific Exhibit in 1940

The Council voted that no scientific exhibit be held at the French Lick meeting.

Membership Report

Membership report showed that out of a total of 4131 physicians in the state, 3140 were members of the association in good standing in 1939 as against 3087 in 1938.

Reports of Committee Chairmen

Various committee chairmen and officials of the state association made brief reports at the luncheon.

Journal Business

The Council renewed the contract with Dr. E. M. Shanklin, editor of THE JOURNAL, for 1940.

Cards of Deceased Physicians

The Council went on record approving the motion that "the card of a deceased physician shall be dropped from THE JOURNAL as soon as his death is known and that his family shall be refunded any money that has been paid in advance on a prorata basis the month following his death." This motion was adopted in connection with professional cards carried in THE JOURNAL.

Elections for 1940

Dr. C. A. Nafe and Dr. C. H. McCaskey were re-elected members of the Executive Committee for 1940, and Dr. M. A. Austin was re-elected chairman of the Council for 1940.

Additional Meetings

In addition to the regular meetings, the Council held one session in regard to local legislation and one special call meeting on April 28, 1940.

Respectfully submitted,
M. A. AUSTIN, M.D., *Chairman.*

REPORTS FROM DISTRICT COUNCILORS

FIRST COUNCILOR DISTRICT

The First District Medical Society held its 1940 meeting on May twenty-third at the Evansville Country Club. In the absence of Dr. H. G. Hamer, of Indianapolis, Dr. W. N. Wishard, Jr., read Dr. Hamer's paper on "Urinary Infections of Childhood."

The following officers were elected: President, Dr. O. M. Graves, Princeton; vice-president, Dr. R. R. Acre, Evansville; secretary, Dr. Stephen Johnson, Evansville.

I. C. BARCLAY, M.D., *Councilor*

SECOND COUNCILOR DISTRICT

Organization affairs in the second district have been so generally without any irregularity that to

a pessimist there must be something coming. Perhaps it is the oncoming battle for "Defense of the American Way."

Our annual district meeting in June was held at Sullivan. The Sullivan County Medical Society presented its usual smoothly conducted session. Vincennes will be the place of the 1941 meeting. The Knox County Society will be in charge. Dr. Robert Moore was elected district chairman; Doctor Brown, of Carlisle, was continued as our perennial secretary.

The Monroe County Society in July held a very fitting meeting in honor of one of its members, Dr. B. D. Myers, who was retiring as dean of the Indiana University Medical School at Bloomington. His friends from over the state met with the Monroe County Society in a well-planned program of appreciation.

The Second District hopes not to be lagging in support of the state society's defense program.

H. C. WADSWORTH, M.D., *Councilor*

THIRD COUNCILOR DISTRICT

The Third District Medical Society had their spring meeting at New Albany, Indiana, with a fairly good attendance and a well-presented program. Due to the State Association meeting at French Lick this fall, it was decided that there would be no fall meeting of the Third District Society.

We are all looking forward to the meeting at French Lick with a great deal of pleasure, and feel that the Third District is better organized to entertain the State Association at the French Lick meeting than ever before. The individual county units seem to be better organized than at any previous time.

WM. H. GARNER, M.D., *Councilor*

FOURTH COUNCILOR DISTRICT

On May 15, 1940, the Fourth District Medical Society met at Seymour, Indiana, with a good attendance.

In the forenoon golf was played at the country club with a goodly number participating. Honors went to Dr. G. A. May, of Madison, Indiana. The scientific program was held in the afternoon in the Elks Club—highlighted by an illustrated lecture by Dr. Tom Noble, Jr., Indianapolis, on the treatment of appendiceal abscess.

The ladies were entertained with a luncheon at the home of Dr. and Mrs. H. P. Graessle and at an afternoon tea at the home of Dr. and Mrs. C. E. Gillespie.

At the evening banquet, Dr. Tom Noble, Jr., Indianapolis, gave us a lecture on the "Native Indians of Colorado."

The next meeting will be held at Batesville, Indiana, and the officers elected are: Dr. George S. Row, Osgood, president, and Dr. J. T. Carney, Batesville, secretary.

M. C. MCKAIN, M.D., *Councilor*

FIFTH COUNCILOR DISTRICT

The component county societies of the Fifth District are all very active and holding regular meetings. The spring meeting of the District was held May 3rd, 1940. The date for the fall meeting has not as yet been set.

O. O. ALEXANDER, M.D., *Councilor*

SIXTH COUNCILOR DISTRICT

The Sixth District Society meeting held at Magnesia Springs on May fifteenth was a success in every way. There was an attendance of about one hundred. An unusually fine program was presented and enjoyed by all.

All of the county societies in the District are meeting regularly and are in good condition. All are doing good work.

SAMUEL KENNEDY, M.D., *Councilor*

SEVENTH COUNCILOR DISTRICT

The Seventh District this year had its first spring meeting. This was held at the Indianapolis Athletic Club and there was a good attendance. The dinner was paid for out of the association's treasury which increased the enjoyment of all present.

The business of the association and its component societies has gone on very satisfactorily. Much extra work and worry has been occasioned by the necessity for all branches of organized medicine to cooperate in the national defense program. This has progressed satisfactorily.

The date of the fall meeting has not yet been set, but will be held in Franklin, Indiana.

All members of the Indiana State Medical Association are invited to attend.

C. J. CLARK, M.D., *Councilor*

EIGHTH COUNCILOR DISTRICT

The affairs in the Eighth District have gone so smoothly that there are no special items to report.

The annual district meeting was held at Elwood by invitation of the local physicians and was outstanding in its success from every standpoint. The attendance was excellent, the program was good, the dinner was fine, and the social element was most satisfactory.

The Randolph County Society will sponsor the next meeting at Winchester.

In the June number of THE JOURNAL I had a communication quoting Dr. W. D. Gatch and Dr. James Ewing concerning the questionable results of so-called special health organization drives to educate the public. Since then further confirmation of this fact is given in *The Journal of The Diseases of the Chest* by Dr. Frank W. Burge, its

editor. He says "Many millions of dollars have been collected and spent in attempting to educate the public concerning the facts of tuberculosis during the past thirty-five years. According to a Gallup survey made recently, only 19 per cent of the public knows that tuberculosis is caused by a germ. Judging by this survey, it would take 150 years to educate the public to the fact that tuberculosis is caused by a germ. It is safe to say that this same 19 per cent is being reached year after year by the publicity campaigns. Evidently the other 81 per cent has not yet been reached, and there is no assurance that it ever will be reached through our program of education."

M. A. Austin, M.D., *Councilor*

NINTH COUNCILOR DISTRICT

Medical affairs for the district moved smoothly during the past year. All the organized county societies held regular meetings of the usual high calibre.

The annual meeting was held at Mudlavia where the component societies were the guests of the Fountain-Warren County Society. The outstanding success of this assembly was due to the untiring efforts of President J. R. Burlington, Vice-President A. L. Ratcliff, and the secretary-treasurer, Lee J. Maris.

For 1941 the district will meet at Frankfort, May twenty-second.

The officers for 1941 are: President, S. B. Sims; vice-president, J. A. VanKirk; secretary-treasurer, F. A. Beardsley, all of Frankfort.

The present incumbent was re-elected councilor for the years 1941-43.

Floyd T. Romberger, M.D., *Councilor*

TENTH DISTRICT MEDICAL SOCIETY

The Tenth District Medical Society has had one spring meeting and will hold its fall round-up at Phil Schmit's on Thursday, September twenty-sixth, beginning at 4:00 p. m. This will be a dinner and evening meeting. Election of officers will be held.

Considerable activity is apparent in the component county societies with excellent meetings which are well attended.

James M. White, M.D., *Councilor.*

ELEVENTH COUNCILOR DISTRICT

We have 206 members, three of whom are honorary members, all active and doing good work and interested in the things that make for good organized medicine.

Our May meeting, held at Huntington, was well attended and up to standard in every respect. The banquet in the evening was well attended, Dusty Miller gave a wonderful after-dinner address; Tom Hendricks and President Ruddell were present. At this meeting Dr. C. R. Herd, of Peru, was elected president for one year and Dr. O. G. Brubaker, of North Manchester, was re-elected secretary-treasurer.

It was decided to hold our next meeting in Wabash County and it has been decided to hold it on the Campus of Manchester College, October 2, 1940. Guest speakers for the North Manchester meeting are Charles R. Bird, M.D., and Harold M. Trusler, M.D., of Indianapolis. We will have something good in the evening. Come!

The fact that the county society in which the meeting is held acts as host to the District Association Meeting and assumes the responsibility of the forenoon clinic and evening program goes a long way in making "Ours the Best District Association in the State."

The seven county societies composing the Eleventh District Association are active, well organized, and hold regular meetings.

Ira E. Perry, M.D., *Councilor*

TWELFTH COUNCILOR DISTRICT

In general, the Twelfth District had a quiet year. Attendance at medical meetings of the component societies was average. Interest in the affairs of the association as well as in medicine's battle to remain free from government interference is extraordinarily keen. Cooperation of county society officers with the headquarters office has been very satisfactory and all recent requests from the latter are almost completed.

The one exciting event of the year was the annual district meeting held in Fort Wayne early in April. The featured attraction was the councilor election. I recommend such contests as a means of boosting attendance.

To my friends in the district, the council and the headquarters office I say, "thanks for everything," and au revoir.

A. Jerome Sparks, M.D., *Councilor*

THIRTEENTH COUNCILOR DISTRICT

The next meeting of this District will be at Goshen on November thirteenth. We cordially invite you to come.

The St. Joseph County Society has discontinued the office of executive secretary. After fourteen months of operation, the project failed to win the support of a majority of the membership.

The activities of the Starke County Society have been handicapped by the small membership of six. Most of the members are affiliating with the La-Porte County Society.

Alfred Ellison, M.D., *Councilor*

EXECUTIVE COMMITTEE

House of Delegates and the Council,
Indiana State Medical Association

Gentlemen:

I READY FOR ANY EMERGENCY

The tempo of state, national and international affairs is so rapid these days and such vast changes are taking place almost hourly that it is most difficult to write a report at this date, some thirty days ahead of the annual session of the Indiana State Medical Association, which may not be thoroughly antiquated by the time it comes to the attention of the House of Delegates. However, your committee will here attempt to give its survey of the important matters which have come before it during the year and, in case events warrant, make a supplemental report to the House of Delegates as to professional problems and activities which may have developed between now and the French Lick session.

First, your committee wishes to state its confidence that the profession of Indiana is ready to serve our country in any emergency, and through the outstanding work of its M-Day and Veterans' Affairs committees it has assumed a place where it has gained nationwide recognition as a leader among state associations in military preparedness.

Second, your committee points with pride to the fact that from an internal organization standpoint the association never occupied a stronger position than today with its membership the largest in its history and its field of activities on behalf of the public and the profession broader in scope than ever before.

With these two generalizations your committee is now ready to report in more detailed form upon duties and activities of the committee during the past year. In general the duties and functions of the committee fall under three headings:

1. Administrative.
2. Management of THE JOURNAL.
3. Administrator of the medical defense fund.

II ADMINISTRATIVE FUNCTIONS OF EXECUTIVE COMMITTEE

(1) How the Executive Committee functions. In addition to the regular formal monthly meetings, which often are all-day affairs, the members of the Executive Committee are called during the year for innumerable informal meetings, conferences, and get-togethers. By this method the committee performs those very important duties which the Constitution and By-Laws have placed upon it, that is, to serve in place of the House of Delegates and the Council when those bodies are not in session. Despite this latitude in power, your committee is ever careful not to over-reach its authority and whenever any subject arises which is not covered clearly by the policies or procedures approved by the House of Delegates your committee never acts on its own authority.

One of the most important parts of the regular monthly Executive Committee meetings has become the noon luncheon period where heads of various committees or individuals having a particular problem which may need the attention of the committee are invited to discuss their problems informally with the committee. In this way unity of action is obtained and duplication of effort and misunderstandings are avoided.

Individuals, groups, or representatives of any society who have a problem they desire to discuss with the Executive Committee are invited to present these problems to the committee. Any problems which cannot be settled by correspondence or individual conference can then come before the committee for complete discussion and if possible decision and recommended action. Thus the committee keeps itself constantly informed in regard to the questions, problems, troubles and worries which may disturb the individual members of the state association.

Your committee feels that the constant maintenance of this contact and viewpoint is essential if the association is to keep itself a vital and active organization.

(2) Membership.

a. The Executive Committee cannot help but point with satisfaction to the fact that for the seventh consecutive year an increase is shown in the membership of the Indiana State Medical Association and to the fact that the membership roll of the association is at the present time the largest in the history of the organization. Figures for the last eleven years follow:

Year	*Number of Physicians in Indiana*	*Regular Members*	*Honorary Members*	*Total Members*
1930	4,102	2,739		2,739
1931	4,073	2,767		2,767
1932	4,073	2,725		2,725
1933	4,073	2,710		2,710
1934	4,049	2,741		2,741
1935	4,049	2,777	30	2,807
1936	4,025	2,803	29	2,832
1937	4,025	2,942	40	2,982
1938	4,081	2,970	62	3,032
1939	4,081	2,982	95	3,077
1940	4,132	3,026	40	3,120

b. *Honorary members.* The committee urges each county medical society to check its records in order that all physicians who are eligible to be honorary members may be included in this classification. Article IV, Section 5, of the Constitution reads as follows regarding honorary membership:

> "Honorary members shall consist of representative teachers and students of science allied to medicine and of physicians and surgeons of distinction not members of the Indiana State Medical Association, who may by vote of the House of Delegates be elected to honorary membership; and any physician of the State of Indiana who has attained the age of seventy-five years and has held member-

ship in the Indiana State Medical Association for twenty years or more may be elected to honorary membership by vote of the House of Delegates, provided his name be proposed for such honorary membership by the county medical society of which such physician is a member."

The Executive Committee has ruled that if the honorary members desire THE JOURNAL the subscription price should be paid by the local county medical society.

c. *Necessity of reporting honorary members.* Several societies have not sent in the names of men who are eligible to honorary membership and as a result on at least one occasion the physicians who should have been listed as honorary members have asked that their state dues be refunded for past years, although their names had not been certified to headquarters office in accordance with regulations. The Executive Committee feels it has no authority to refund such dues, hence it hopes that the officers of each county medical society will be sure that the names of all members entitled to honorary membership are certified to headquarters office during the year when such certifications are due.

(3) Commitment of patients to University hospitals. At this time last year, when the Executive Committee made its annual report, complaints from several communities in the state were brought to the attention of the Executive Committee in regard to the statute passed at the 1939 session of the legislature giving the judge full powers to commit patients to the University hospitals. During the year much of the misunderstanding has been cleared away and in the majority of places the situation is being handled satisfactorily due to the fact that the local county medical societies have established satisfactory working agreements with the judges and the township trustees in carrying into effect this act. As it did a year ago, your Executive Committee still feels definitely that despite some mistakes in the present law, it has been a step in the right direction, and when properly administered, it should lessen the requests from each community for admissions to the University hospitals.

a. *Action of county societies.* It is understood that several county societies have passed resolutions instructing their delegates to present resolutions at the coming meeting of the House of Delegates extending the rights of judges not only to commit patients to the University hospitals, but also to commit patients to local institutions. Under the present law commitments to local institutions are now the sole functions of township trustees and undoubtedly any legislation which would increase the powers of the judges in this matter will be opposed by the township trustees. The officers of the society would like to have definite instructions from the House of Delegates in regard to such suggested changes.

b. *Lake County checks on University admissions.* Information has been brought before the committee that the Lake County Medical Society is checking into the reasons and causes for all admissions into the University hospitals for that county. It is understood that the University and the Lake County Medical Society authorities are cooperating in making this survey.

(4) Farm Security Administration. At the present time the following county medical societies have made agreements with the Farm Security Administration for the care of Farm Security clients: Daviess-Martin, Starke, Franklin, Harrison, and Scott.

In addition to these counties a physical examination survey of these clients was made in Montgomery county with the consent of the Montgomery County Medical Society. In discussing this with a representative of the Farm Security Administration, the Executive Committee endorsed the plan in principle and recommended that the Farm Security Administration make arrangements to have the examining done through one of the local county medical societies in Indiana. (Montgomery county was selected by the Farm Security Administration as the county.) The committee suggested that the work be done by local physicians and not by outside physicians brought in by the State Board of Health or the medical school unless such procedure was approved by the county medical society.

(5) Employment of full-time secretaries by county medical societies. In Indiana the St. Joseph County Medical Society has now been working for more than a year with a full-time executive secretary organization. In the meantime the Vanderburgh County Medical Society, it is understood, is contemplating such a move. During the year the Indianapolis Medical Society, by vote of its membership, rejected the establishment of such a system in Marion county.

(6) Group hospitalization and medical service plans. Throughout the year your committee has kept in constant touch with the developments in other states, not only with their group hospitalization but also with their medical service plans. The committee has been especially interested in watching the developments of the Michigan plan. In the past the House of Delegates has gone on record favoring sponsoring group hospitalization plans with the cooperation of the hospital organization of the state. As matter of fact, the House of Delegates went further and endorsed non-profit medical care plans as well at its session last year.

The Executive Committee hopes that the House of Delegates will go on record definitely as to how far it desires the state medical association to go not only in this matter of group hospitalization plans but in regard to legislation which would create medical service plans in this state. The committee hopes that the House of Delegates will

define very definitely at French Lick its desires in these matters.

a. *Indiana plan promoted by Indiana Travelers Assurance Association.* Some misunderstandings have arisen due to the fact that the Indiana Travelers Assurance Company has used the phrase "Indiana plan" in connection with its hospitalization insurance contracts. Investigation has brought to light the fact that that insurance company used the phrase "Indiana plan" several years before the Indiana State Medical Association's plan of preventive medicine became known as "The Indiana Plan." Of course, the "Indiana plan" promoted by the Indiana Travelers Assurance Company has nothing whatever to do with "The Indiana Plan" sponsored by the Indiana State Medical Association, but because of precedence nothing can be done to keep the Indiana Travelers Assurance Company from using this title. In fact the Executive Committee approved an advertisement in THE JOURNAL by that company containing the phrase, "Indiana Plan."

b. *Hospital Benefit Association.* Publicity which appeared in the press in regard to organization of the Hospitalization Benefit Association intimated that this organization has received some official endorsement from the medical profession. Although some individual physicians in Lake county are interested, it has not received the official endorsement of either the Indiana State Medical Association or the Lake County Medical Society.

(7) Socialized medicine. Throughout the year the officers of your society have kept themselves constantly informed in regard to any development which they felt brought nearer socialized medicine to the United States. Although necessarily working within a limited sphere the Executive Committee did not hesitate to act aggressively whenever it felt it could deal a telling blow in the national battle waged upon this question. For this reason it made an early contact with Paul V. McNutt, National Social Security Administrator, and discussed the question involving the health and the public welfare of the people with him. As always, the reception given by Mr. McNutt was most cordial and understanding. In addition, Indiana sponsored one of the key medical meetings held in the country last year when it had as its guest at the annual secretaries' conference Senator James E. Murray of Montana, chairman of the Senate Sub-Committee to study the Wagner bill. This gave Senator Murray an opportunity to meet the leaders of the medical profession throughout the country, many of whom attended this conference, and it gave the leaders of the medical profession an opportunity to present the viewpoints of American medicine in regard to these national questions direct to Senator Murray. In some respects the results are deemed to be satisfactory. In others, your committee was definitely disappointed, particularly when Senator Murray advocated the inclusion of an osteopath on the national advisory board which was set up in connection with the Wagner hospital bill.

Your attention is called to a pamphlet entitled "Dentistry and Government" distributed by the National Health Program Committee of the American Dental Association, which your committee feels is one of the best handbooks that has yet been published on the general subject of the national health program and the government. Copies of these pamphlets were obtained from the American Dental Association and sent to the councilors of the association and members of the Committee on Public Policy and Legislation and the Permanent Study Committee on Health Insurance and National Medical Situation.

(8) Indigent Sick. For the first time your committee feels that some definite headway is being made in smoothing out many of the various problems which arise in connection with the difficult and perplexing problems in regard to the care of the indigent sick. The reason for this optimism is due to the fact that during the year an unusually fine piece of work has been done by the Medical Relief Committee headed by Dr. J. S. Leffel, of Connersville, appointed by the president of the association. Although it probably will take several years before the work being done by this committee is translated into an actual, definite program in each county, nevertheless the sound approach to this subject now being made is most encouraging.

(9) United States Pharmacopoeial convention. Dr. Samuel Kennedy of Shelbyville and Dr. W. B. Challman of Mount Vernon served as delegates from Indiana to the United States Pharmacopoeial convention which was held at Washington, D. C., May 14 and 15, 1940. The American Medical Association suggested that the state association send delegates. This convention, according to the report of the American Medical Association, was outstanding in its accomplishments, and the committee herewith publicly acknowledges the services rendered by Dr. Kennedy and Dr. Challman.

(10) Cult practice.

a. The committee commends Toner Overley, manager of the Better Business Bureau, for the service rendered the State of Indiana in making an investigation and bringing charges against Hiel Crum for his fraudulent actions in treating the sick.

b. The committee warns the profession that the cult organization is busy laying groundwork in order to break down the present high standards of medical practice in this state in the 1941 session of the legislature. The legislative committee has from time to time published bulletins informing the profession of such a program on the part of the cultists whereby even before a bill is introduced they are attempting to pledge prospective

legislators to support such a measure by having them sign pledge cards, a matter which may be said to be against the spirit if not the letter of the corrupt practices act.

c. During the year the possibility developed that refugee physicians were aligning themselves with cultists as they cannot under the present law become regularly licensed physicians in Indiana. Although it is not believed that much of this has taken place here in Indiana, the dangers of such procedure can be readily seen.

d. During the year a complaint was received at the headquarters office that in one community the telephone directory listed a chiropractor under the title of "physician." Complaint in regard to this listing was made by an official of the state medical association, and the promise was received that there would be a change in the listing in the next telephone directory. The committee recommends that each society should check on such misleading practices in each county.

(11) National Physicians' Committee. During the year several representatives of the National Physicians' Committee, a group independent of the American Medical Association, functioning to uphold the present method of medical practice as opposed to socialized medicine, addressed various groups of the Indiana State Medical Association. It was the feeling of the members of the Executive Committee that any activities of this committee should be kept absolutely independent from the Indiana State Medical Association, and whether or not he desired to be a member of this committee was up to each individual physician to determine.

(12) Communities desiring physicians. The committee would appreciate any suggestions as to how requests for physicians in some of the smaller communities of Indiana can be filled more promptly. At the present time a list of possible locations for physicians is kept at the headquarters office and whenever requests are received from physicians for information as to where they may locate they are referred to this list of possible locations. A number of vacancies have been filled in this way. However, repeated attempts to arrange for physicians to locate in several communities have been unavailing despite the fact that citizens in these communities are urgent in their requests for the services of a physician.

(13) Final meeting of House of Delegates. The Committee on Scientific Work directed a formal complaint to the Executive Committee to the effect that the breakfast meeting of the House of Delegates often had lasted so long that only a small group attended the general scientific meeting that is held the last morning of the annual session. The scientific program committee expressed the hope that conflict between the House of Delegates and this scientific meeting could be avoided in the future. With this in mind the suggestion was made that the breakfast meeting of the House of Delegates might be eliminated and that the last meeting be a luncheon meeting held on the final day of the annual session. If the House of Delegates meeting is called before noon, no change in the Constitution and By-Laws of the state association would be necessary. This matter was referred to the Council and the Council in turn has left the matter up to the vote of the members of the House of Delegates, which will be taken at the conclusion of the opening meeting of that body.

A preliminary postcard vote on this change resulted in the following:

In favor of breakfast meeting	30
In favor of luncheon meeting	74
No preference	4
Total replies (out of 129 membership)	108

(14) Complaint against maternity home regulations. Much time during several meetings of the committee was spent in discussing complaints against the regulations set up by the State Department of Public Welfare concerning maternity homes. A formal statement in regard to this came from the Vigo County Medical Society and representatives from that society were invited, along with Dr. E. O. Asher, chairman of the State Board of Health Liaison Committee to Deal with Social Security Act, which committee had drawn up and approved these regulations, to attend a meeting of the committee to discuss this matter. Amendments and changes which for the most part took care of the objections raised by the Vigo County Medical Society were made in the regulations for these maternity homes.

(15) Membership certificates. Recommendation is herewith made to the Council that a membership certificate be given to each member of the Indiana State Medical Association which may be framed and placed on the wall of the physician's office. The committee suggests that copy for such certificate read as follows:

INDIANA STATE MEDICAL ASSOCIATION

Membership certificate

This is to certify that _____ M. D. is a member, in good standing, of the Indiana State Medical Association and his local county medical society, has paid his annual dues for the year designated hereon, and is entitled to all the privileges of membership.

(Signed)

_____, M. D. _____, M. D.

Secretary President

III THE JOURNAL

In 1940 the C. E. Pauley Company will complete their third year of printing The Journal. The contract was continued without asking for further bids when The Pauley Company offered to continue without a change in rate, with the stipulation that The Journal would absorb any increase in paper cost. This was agreed upon and in the early summer, when paper rates started to rise,

a sufficient supply was contracted for to protect our page-rate for the rest of this year. Mr. Lineback, manager for the Pauley Company, has assured us that we may count upon continuance at the same rate in 1941 unless there are drastic changes in the printer's scale of wages or other changes which may be expected if this country becomes actively engaged in war.

Advertising

Our advertising representatives have been somewhat pessimistic this year, and for justifiable and understandable reasons. A comparison of advertising income for 1940 with previous years is given for your information.

First 8 months	*1937*	*1938*	*1939*	*1940*
Bureau Agency	$ 3662.92	3776.60	3381.28	3151.89
Direct	2324.19	2464.00	2907.95	2483.53

Coupons frequently are used by national advertisers and their advertising agencies, and often such advertisers base their decisions of the value of advertising upon the percentage of return of coupons. Samples, literature, and sometimes merchandise at small cost, for the purpose of introduction, are offered. When agencies receive *no* requests for such material, they cannot be blamed for withdrawing their advertising. You, as members of this Association, can materially increase the advertising revenue of THE JOURNAL by answering keyed and coupon ads; likewise, your neglect in so doing has been the cause of THE JOURNAL'S losing two good advertising accounts within recent years. Advertisers want concrete evidence of the value of their advertising; we urge you to supply it by answering ads whenever possible.

Number of pages printed in 1939 in comparison with other years:

Year	*Reading Pages*	*Per Cent*	*Adv. Pages*	*Per Cent*	*Total*	*Average Pages Per Issue*
1933	634	64	358	36	992	82
1934	604	60	408	40	1012	84
1935	704	62	428	38	1132	94
1936	680	59	472	41	1152	96
1937	674	57	514	43	1188	99
1938	728	59	504	41	1232	102.6
1939	730	59	502	41	1232	102.6

The number of pages published in 1938 and 1939 were the same—an average of 102.6 pages per issue. This represented the greatest number of pages that could be published with the available income.

IV MEDICAL DEFENSE ACTIVITIES

(1) During the year numerous complaints have been received at the headquarters office in regard to the constant rise in rates and the changes in the contracts of the various commercial companies selling medical defense insurance. In order to obtain definite information concerning the various contracts offered to the physicians by these companies, the committee hopes within the next few months to have prepared a comparative table showing the features of the contracts written by the various companies. It is hoped that this may be prepared in such a form in order that physicians who heretofore have been confused by the legal verbiage in these contracts may know exactly the limits of the protection they are receiving when they take out insurance with one of these companies. It must be stated here that this does not indicate a lack of confidence on behalf of the committee in the various companies which are writing the majority of the insurance for the Indiana physicians. On the other hand the committee is deeply appreciative of the utmost cooperation it has received from these leading companies in the past. However, the committee does feel that the situation should be clarified so everything in regard to the limits of protection and other features offered by each company may be understood by every physician in the state who is insured by a commercial company. Statements have been made by some companies that it has been necessary for them to raise the cost of their policies because of an increased number of suits filed in certain sections of Indiana. Your Executive Committee has been unable to obtain any evidence which would indicate that there is any large increase in the number of suits brought against physicians within recent years in Indiana.

(2) Malpractice cases. A year ago at the time of this report August 1, 1939, the following fourteen cases were pending before the committee, four of which were closed during the year, leaving ten cases still pending.

Case No. 156—Suit filed March 27, 1928. Verdict for plaintiff after six days' trial in 1933; case to be appealed. Expense, $66.28, paid September 23, 1929; $350.00 paid June 30, 1933. Case pending.

Case No. 200—Suit filed February 12, 1932. Pending.

Case No. 203—Suit filed August 21, 1934. Pending.

Case No. 212—Suit filed November, 1935. Case tried December 2, 1936. Nine days' trial and argument; verdict against defendant; case to be appealed by defendant. Expense to date, $293.15, paid January 13, 1937.

Case No. 214—Suit filed April 1, 1936. Case terminated in a judgment dismissing the plaintiff's cause. Expense, $175.00, paid March 7, 1940.

Case No. 216—Suit filed March 16, 1936. Pending.

Case No. 219—Suit filed March, 1934. Verdict against defendant. Appeal pending.

Case No. 221—Suit filed July 1, 1937. Pending.

Case No. 222—Suit filed July 8, 1937. Case dismissed, July 7, 1939. Expense, $100.00, paid September 2, 1939.

Case No. 223—Suit filed July 31, 1937. Change of venue. Motion filed to dismiss the cause for lack of prosecution, which court denied, and plaintiff filed a demurrer to the attorney's affirmative answer. May 8, 1939, court handed plaintiff's decision overruling the demurrer. January 5, 1940, cause assigned for trial but case dismissed for want of prosecution. Expense, $122.50, paid February 15, 1940.

Case No. 224—Suit filed August 8, 1938. Case dismissed February 13, 1940. Expense, $100.00, paid April 1, 1940.

Case No. 225—Suit filed July 28, 1938. Pending.

Case No. 226—Suit filed November 5, 1938. Suit withdrawn and another filed January 16, 1939. Pending.

Case No. 227—Suit filed April 7, 1939. Pending.

The following two cases were closed at this time last year but the attorneys' bills were pending. These bills have been paid since the last report:

Case No. 210—Suit filed September 18, 1935. Case settled out of court for $500.00. Expense, $200.00, paid April 1, 1940.

Case No. 215—Suit filed June 22, 1936. Report May 17, 1938, plaintiff deceased. Motion of defendant to dismiss action sustained by court on June 13, 1939. Expense, $100.00, paid August 19, 1939.

Since August 1, 1939, and up to September 1, 1940, the following five new cases have come before the committee, one of which has been closed, making a total of fourteen cases pending at the present time as against the same number of unclosed cases at the same time last year:

Case No. 228—Suit filed September 23, 1939. Pending.

Case No. 229—Suit filed December 14, 1939. Dismissed March 30, 1940. Expense, $100.00, paid April 1, 1940.

Case No. 230—Suit filed November 18, 1939. Pending.

Case No. 231—Suit filed January, 1940. Pending.

Case No. 232—Suit filed April 11, 1940. Pending.

Expense incurred for medical defense from August 1, 1939, to September 1, 1940 (13 months) amounted to $897.50, as compared with no expense incurred during the period from August 1, 1938, to August 1, 1939.

3. Medical Defense Fund Statement, from August 1, 1939, to September 1, 1940, (13 months):

Balance August 1, 1939		$ 6,614.45
Deposits:		
Dues, 2—1938 members at 75c	$ 1.50	
77—1939 members at 75c	57.75	
3018—1940 members at 75c	2,263.50	
		2,322.75
Interest on bonds		260.00
		$ 9,197.20
Disbursements:		
Investment in Government Bonds	$3,000.00	
Malpractice fees	897.50	
Salary of Association attorney (13 months)	650.00	
Treasurer's bond	15.00	
Printing	21.45	
		$ 4,583.95
Balance in Medical Defense Fund checking account September 1, 1940		$ 4,613.25

Respectfully submitted,

Cleon A. Nafe, M.D., *Chairman*
C. H. McCaskey, M.D.
Karl R. Ruddell, M.D.
A. M. Mitchell, M.D.
M. A. Austin, M.D.

COMMITTEE ON PUBLIC POLICY AND LEGISLATION

House of Delegates,

Indiana State Medical Association

Gentlemen:

During the last year your committee has made strenuous efforts to keep informed as to current events affecting the welfare of medicine and public health. It has divided its work into two scopes of activity. First, contacting those public officials and candidates for public office who are apt to have some interest in medical care. Second, the committee has undertaken a large program of organized public relations.

With the help of many of you the committee has attempted to educate public officials and candidates for public office to the effect that organized medicine is first of all interested in the public welfare. We have attempted to prove to these people that the ideals of organized medicine are synonymous with the kind of medical practice which is to the best interest of the public, that the interest of organized medicine is not selfish for itself, but is violently selfish for public welfare. It is the thought of your committee that to sell this philosophy to the public is the most important thing necessary to obliterate antagonism and misunderstanding on the part of various groups and individuals to medicine.

Your committee recognizes that those holding public office making and administering laws and regulations are not the mere representatives of political parties, but in many instances have been placed in public office through the influence of various "pressure groups". The most prominent of such "pressure groups" are the various farm groups, labor groups, veteran groups, business and professional organizations. This being so it has been necessary to keep in close contact with these various groups to assure ourselves that no action be taken by any of them contrary to the best interests of medicine. Frequently we have found that when the correct information and facts have been supplied, such groups not only change their opinion but actually become ardent supporters and allies of organized medicine.

Your committee has cooperated intensively with the Inter-Professional Health Council which as you know consists of representatives of our association working together with representatives of the dental, nursing, and drug professions as well as hospital administrators. The splendid spirit shown by all these groups in this movement, in which it has been recognized that the various health professions have a common interest, has been a source of great pleasure to all of us who have taken an active part. Your committee especially wishes to commend the untiring efforts of Dean Jordan of the School of Pharmacy of Purdue University who is chairman of the Inter-Professional Health Council and of our own Dr. Crockett who is chairman of the executive committee of the Inter-Professional Health Council.

Several years ago your committee came before this House and pointed out the advantages of recognizing the Woman's Auxiliary to the State Association. It is with great pleasure that we report to you the wisdom of that action. The various units of the Woman's Auxiliary, many of which have been recently organized, have been of the greatest service in our program of public relations.

In conclusion, your committee wishes to express sincere appreciation for the cooperation it has received from the officers, the other committees,

and many members of the association. Without the help of all of you, little could have been accomplished in carrying out the aims of your committee as stated by the constitution of our association.

Respectfully submitted,

NORMAN M. BEATTY, M.D., *Co-Chairman*
J. WILLIAM WRIGHT, M.D., *Co-Chairman*
O. T. SCAMAHORN, M.D.
GEORGE DANIELS, M.D.
GEORGE DILLINGER, M.D.
W. W. WASHBURN, M.D.
C. M. JONES, M.D.
O. T. BRAZELTON, M.D.
C. B. PARKER, M.D.
H. C. METCALF, M.D.

THE BUREAU OF PUBLICITY

House of Delegates,
Indiana State Medical Association

Gentlemen:

I FOREWORD

Having in years gone by set a pattern for public relations and public expression which has been adopted by many county and state medical societies, the Bureau of Publicity has specialized in something new this year, and has found the public reaction most complimentary and gratifying. This new project now being carried on under the direction of the Bureau of Publicity is a current series of weekly newspaper releases entitled "Indiana's Twelve Killers" which are now appearing in the papers of Indiana. Details in regard to this series will be given under the heading of "Newspaper Publicity" later in this report.

II ETHICAL PROBLEMS

1. Opinions of the bureau. Although the findings of the Bureau of Publicity in regard to ethical questions have no legal jurisdiction, some years ago the bureau was authorized by the House of Delegates to give opinions concerning certain ethical practices. By practice and tradition these opinions have gained certain official standing so far as the members of the state association are concerned. Because of this, many questions involving the principles of medical ethics are brought to the attention of the bureau each year and generally the opinion of the bureau is regarded as authoritative in matters of actual practice. Among the questions which have come before the bureau this past year involving the principles of medical ethics are the following:

(a) *Neon Signs.* "Are neon signs ethical?" is a question which has been asked many times of the bureau within the past several years. Of course a great deal depends upon the size, the location and the prominence of such signs. A sign does not have to be a neon sign to be in bad taste. Lettering on an office window or a door which is over-conspicuous in size or in coloring is bad taste and hence unethical. If all the physicians in a town use a sign of the same size it would not be unethical, but if one physician used a neon sign and the others did not use neon signs, that would give undue prominence to one physician's name, and hence the Bureau feels that the use of a neon sign in this instance would be a breach of local custom and therefore unethical.

(b) *Announcements in regard to entering practice or opening a new office.* Many times during the year the bureau receives requests for information as to the propriety of a physician who opens a new office or enters practice sending out announcement cards. In connection with this the bureau quotes Section 4 of Chapter III from the Principles of Medical Ethics of the American Medical Association pertaining to advertising, professional announcements, etc.:

> Sec. 4.—Solicitation of patients by physicians as individuals, or collectively in groups by whatsoever name these be called, or by institutions or organizations, whether by circulars or advertisements, or by personal communications, is unprofessional. This does not prohibit ethical institutions from a legitimate advertisement of location, physical surroundings and special class—if any—of patients accommodated. It is equally unprofessional to procure patients by indirection through solicitors or agents of any kind, or by indirect advertisement, or by furnishing or inspiring newspaper or magazine comments concerning cases in which the physician has been or is concerned. All other like self-laudations defy the traditions and lower the tone of any profession and so are intolerable. The most worthy and effective advertisement possible, even for a young physician, and especially with his brother physicians, is the establishment of a well-merited reputation for professional ability and fidelity. This cannot be forced, but must be the outcome of character and conduct. The publication or circulation of ordinary simple business cards, being a matter of personal taste or local custom, and sometimes of convenience, is not *per se* improper. As implied, it is unprofessional to disregard local customs and offend recognized ideals in publishing or circulating such cards.
>
> It is unprofessional to promise radical cures; to boast of cures and secret methods of treatment or remedies; to exhibit certificates of skill or of success in the treatment of diseases; or to employ any methods to gain the attention of the public for the purpose of obtaining patients.

To amplify and explain this section of the principles the following letter was received from the American Medical Association:

> "I take great pleasure in enclosing a copy of the Principles of Medical Ethics. You will find on pages 7 and 8 the section pertaining to advertising, professional anouncements, etc. You will observe that in the matter of professional announcements much is left to local custom, and I respectfully suggest, therefore, that you ascertain what may be the policy of your own component county medical society with respect to the distribution of announcement cards and other phases of this general subject.
>
> "You know, of course, that the Principles of Medical Ethics specifically declare that the solicitation of patients by any means is unprofessional. It is my purely personal opinion

that in view of that declaration in the Principles of Medical Ethics it is not at all desirable that a physician send announcement cards to members of the lay public. It is also my purely personal opinion that it is not desirable for a physician to send to laymen statements pertaining to special courses of training that the physician may have had. My observation has been to the effect that this procedure on the part of thoroughly competent physicians has in a number of instances led to a distribution of circulatory statements of one kind or another by men who have been licensed to practice medicine but who have not enjoyed any unusual advantages and who, perhaps, have not definitely established themselves as thoroughly competent physicians.

"Please understand that the opinions herein expressed are purely personal opinions."

III HISTORICAL WORK

1. Work of medical historian. The Bureau of Publicity here takes the opportunity to congratulate the historian of the state association upon the work he is doing in collecting, assorting, collating and analyzing much valuable historical material which he receives during the year from the various county medical societies. At the meeting of the House of Delegates last year the suggestion was made that the historian of the state association "be given opportunity to bring Dr. Kemper's medical history up-to-date." The history referred to is "The Medical History of the State of Indiana" by G. W. H. Kemper, M.D., published in 1911.

2. Dedication of Jane Todd Crawford's grave by Indiana Hospital Association. The Bureau here also wishes to congratulate the Indiana Hospital Association upon its dedicatory program on May 11, 1940, National Hospital Day, which took place at the Johnson cemetery near Sullivan, Indiana, in connection with the unveiling of the cenotaph erected at the grave of Jane Todd Crawford. The Indiana State Medical Association was represented at these ceremonies by Mrs. O. G. Pfaff of Indianapolis, chairman of the Pioneer Memorial Committee of the Woman's Auxiliary to the Indiana State Medical Association, Dr. A. M. Mitchell of Terre Haute, president-elect of the Indiana State Medical Association, and Dr. W. N. Thompson of Sullivan.

3. Bronze tablet for medical pioneers. The final sketch of the bronze tablet which is to be placed at the Indiana University Medical Center commemorating the four medical pioneers of Indiana has been completed. The pioneers memorialized in this bronze tablet are:

Dr. John Stough Bobbs
Dr. John Lambert Richmond
Mrs. Jane Todd Crawford
Mrs. Z. (Mary E.) Burnworth

4. The Bureau wishes to thank an Indianapolis physician for a copy of the index to the Transactions of the Indiana State Medical Society from the beginning of the society in 1849 to 1907, prepared by Dr. G. W. H. Kemper of Muncie, which it received. This index will be kept on file at the headquarters office.

5. Sketch of early physicians of Indiana. The chairman of the Bureau of Publicity compiled a book of photographs containing the sketches of early physicians of Indianapolis and the pictures and short biography of each of the presidents of the Indianapolis Medical Society. A short sketch giving the history of the Indianapolis (Marion County) Medical Society is also included. This book, completed, has been formally presented to the Indianapolis Medical Society.

IV NEWSPAPER PUBLICITY

1. Indiana's Twelve Killers. Feeling that the Bureau could do nothing more worthwhile than give the Indiana public, in language that the man on the street can understand, information based upon the best scientific knowledge available at the present time in regard to heart disease, cancer, pneumonia and the other causes of the large majority of deaths in Indiana, the bureau has undertaken to publish a series of bulletins upon "Indiana's Twelve Killers." The bureau felt that such a series of articles would be of particular value at this time due to the fact that so often articles prepared for lay campaigns against syphilis, tuberculosis, cancer, etc., are motivated by the fear complex; hence the bureau felt that a series of articles could be prepared by physicians in which care is taken not to throw the public into hysteria or panic about cancer, syphilis and heart disease.

These articles are based upon the mortality figures published for 1938, the latest ones available from the Bureau of Vital Statistics of the State Board of Health, at the time the series was started. The twelve leading causes of death, according to these figures, are:

Twelve Leading Causes of Death for 1938 in Indiana

	CAUSES	TOTAL DEATHS	RATES
1.	Heart Disease	8,420	243.2
2.	Cerebral Hemorrhage	4,333	125.1
3.	Cancer	3,997	115.2
4.	Accidental	2,665	76.8
5.	Pneumonia	2,472	71.3
6.	Nephritis	2,285	65.7
7.	Arteriosclerosis	1,478	40.5
8.	Tuberculosis	1,380	39.8
9.	Suicide	581	16.7
10.	Diabetes Mellitus	570	16.4
11.	Influenza	447	12.8
12.	Infant Diarrhea	305	8.7

Twelve Leading Causes of Death for 1938 in the United States

	CAUSES	TOTAL DEATHS	RATES
1.	Heart Disease	350,168	268.9
2.	Cancer	149,214	114.6
3.	Cerebral Hemorrhage	111,567	85.7
4.	Nephritis	100,520	77.2
5.	Accidental	93,805	72.0
6.	Pneumonia	87,923	67.5
7.	Tuberculosis	63,735	49.0
8.	Diabetes Mellitus	31,037	23.8
9.	Arteriosclerosis	22,208	17.1
10.	Suicide	19,802	15.2
11.	Influenza	16,520	12.7
12.	Appendicitis	14,300	11.0

The causes of death in Indiana rate differently from the causes of death in the United States, as may be seen by comparing the two tables.

To prepare these articles the bureau drafted physicians from the various specialties to work on each bulletin, in some cases having two or three men do this work when it was felt that such procedure was warranted because of the difficulty in condensing the subject matter into one article. For instance, in the case of heart disease, a group of men who pay special attention to this subject conferred in regard to the articles upon heart disease and each one covered a phase of the subject in the series of releases upon that subject. The articles upon the twelve killers, released to date, follow:

Heart Disease—Killer Number One
General Aspects of Heart Disease
The Heart of Middle Life
Heart Disease in Children
Acute Heart Attacks
Angina Pectoris
Coronary Thrombosis
Cerebral Hemorrhage—Killer No. 2
Cerebral Hemorrhage and High Blood Pressure
What is Cancer?
Prevention of Cancer
The Early Diagnosis of Cancer
More About Early Diagnosis of Cancer
The Treatment for Cancer
Automobile Accidents—Killer No. 4
First Aid to the Victim of a Highway Accident

The response of the public to these articles has been unusually enthusiastic, many hundreds of requests having been received for the series on heart disease and some requests coming for the entire series of articles. Requests have been received from several state societies for permission to duplicate the series in their states according to their own vital statistics. THE JOURNAL is contemplating using these twelve subjects, one for each month, as monthly topics for the 1941 issues of THE JOURNAL.

2. Other articles released by the bureau during the year in addition to these follow:

Evansville Postgraduate Meeting
Annual Session of Indiana State Medical Association at Fort Wayne, Indiana (9 releases)
Holiday Health Hints
Secretaries' Conference
National Social Hygiene Day
Speed is Essential in Pneumonia Battle
M-Day Release and Conservation of Vision Resolution

These releases, totaling 391 at each mailing, were distributed as follows:

(1) One to each councilor and the secretary of each county medical society.
(2) Editors of 200 newspapers and magazines of the state received copies. Besides these, the articles often are carried in the *Hoosier Health Herald* of the Indiana Tuberculosis Association, and several other health publications of the state, including twelve religious, fraternal, and farm journals.
(3) One to each secretary of each state medical association.

3. Publicity by Marshall County Medical Society. The Bureau of Publicity has followed with a great deal of interest the publicity program sponsored by the Marshall County Medical Society. It was particularly interested in the outcome of this program due to the fact that Marshall County is the first county in Indiana, and perhaps in the country, outside of a metropolitan district, which has attempted a publicity campaign with regular, periodic releases to the press. Other counties in Indiana, notably Lake, St. Joseph and Vigo counties, all representing metropolitan areas, have carried on their own individually sponsored publicity programs, but it was left to Marshall County to make this attempt for a rural community. Both in content and preparation these articles have been, in every instance that has come to the attention of the bureau, of high grade. A story in regard to the preparation and presentation of these articles, with pictures of how they appeared in the various newspapers of the county, was carried in the July issue of THE JOURNAL. The bureau herewith expresses its appreciation to the Marshall County Medical Society for the work it has undertaken and cites these articles for excellence, as they have been informative, simple in language, and completely devoid of personal publicity.

4. "Face Tomorrow Without Worry." The advertisement prepared by the Lake County Medical Society entitled, "Face Tomorrow Without Worry," which appeared in the Gary *Post-Tribune* of February 12, 1940 received the wholehearted approval of the bureau. It is the opinion of the bureau that the wording of this advertisement and this method of educating the public as to services rendered by the Lake County Medical Society are most worthwhile.

V OTHER AVENUES OF PUBLICITY

1. Speaking engagements before lay and medical groups.

1939

September 13—Sullivan County Medical Society, Sullivan.
September 28—Dearborn-Ohio County Medical Society, Aurora.
November 22—Clay County Medical Society, Brazil.
December 6—Shelby County Medical Society, Shelbyville.
December 20—Parke-Vermillion County Medical Society, Clinton.

1940

March 12—Woman's Auxiliary to the Tippecanoe County Medical Society, Lafayette.
March 20—Parke-Vermillion County Medical Society, Clinton.

April 11—Women's Auxiliary to the Lake County Medical Society, Hammond.
May 16—Ninth District Medical Society, Mudlavia Springs.
June 6—Second District Medical Society, Sullivan.
July 1—Rotary Club, Greensburg.

2. Contagious diseases prevention pamphlet. One of the most popular pamphlets prepared by the Bureau of Publicity was the one published several years ago entitled, "Information Regarding the Prevention of Contagious Diseases." Thousands of these pamphlets have been distributed to Indiana parents through the State Fair Committee of the Indiana State Medical Association which sponsors a health exhibit at the Indiana State Fair, and the Bureau of Maternal and Child-Health of the Indiana State Board of Health. The Bureau of Publicity this year had this pamphlet brought up to date and reprinted.

VI BUREAU ACTS AS ADVISORY COMMITTEE TO THE WOMAN'S AUXILIARY

Acting in an advisory capacity to the Woman's Auxiliary the Bureau of Publicity this year takes great pride in calling attention of the profession to the fact that the Woman's Auxiliary has greatly expanded its effort during the past twelve months. The officers and members of the Auxiliary are to be congratulated upon the great progress made in organization lines. The bureau understands that the number of local auxiliaries has been increased from ten to twenty-five during the past year, and that interest in auxiliary work is keener now than perhaps ever in the Auxiliary's history.

VII FINANCIAL STATEMENT OF THE BUREAU

The expenditures of the bureau from August 1, 1939, to September 1, 1940, follow:

Clippings	$ 126.88
Postage	157.17
Stationery and mimeograph supplies	86.29
Printing	94.00
"Indiana Plan"	57.45
Miscellaneous	4.46
Total expense (13 months)	$ 526.25

VIII CONCLUSION

During the nineteen years since the bureau was formed it has fallen to the lot of the bureau to attempt many new and progressive methods of educating the public in regard to subjects having to do with medicine and public health. The bureau is always on the lookout for new conceptions and new avenues of approaches to this subject and it will appreciate any suggestions which any committee or any individual member of the profession may have.

Respectfully submitted,
William N. Wishard, M.D., *Chairman*
F. M. Gastineau, M.D.
C. F. Thompson, M.D.

COMMITTEE ON CIVIC AND INDUSTRIAL RELATIONS

House of Delegates,
Indiana State Medical Association.

Gentlemen:

I beg to report that due to lack of advocation made by the members for services of this committee, very little has been done in the past year and, therefore, no report is forthcoming.

Respectfully submitted,
August F. Knoefel, M.D., *Chairman.*

COMMITTEE ON MEDICAL EDUCATION AND HOSPITALS

House of Delegates,
Indiana State Medical Association

Gentlemen:

Because of the uncertainty of the times, it has been thought best by your committee not to undertake new or untried methods of continuing education in the state. Some thought has been given to a combination of activities of the Extension Department of Indiana University and the Committee on Medical Education and Hospitals of the State Medical Association for the purpose of extension teaching throughout the state, but since this method of teaching is being experimented with in other states, it was thought best to defer definite action for the present.

During the year several additional intramural short courses for graduates have been added to those already offered by Indiana University School of Medicine. A one-week course was given at the Medical School in July for men that were interested in heart disease. This course was well attended and the students were very well pleased with the way in which it was given. It is planned to make this an annual affair. A course in pediatrics was also offered. This course was tried on a different basis, namely, all-day meetings were held on each of four consecutive Wednesdays. Although only fairly well attended, sufficient interest was expressed to justify its repetition next year. These courses were in addition to the regular week of general intensive post-graduate study. This course was again very well attended, many men having taken the course several times. It is interesting to note the increase in out-of-state attendance. This also is true of the annual Ear, Nose and Throat post-graduate course. It is planned next year to add several other courses in special fields as a regular part of the post-graduate training offered at Indiana University School of Medicine. Your committee wishes to congratulate the University on extending its scope in post-graduate education by offering these courses to members of the State Association. Your committee also wishes to call your attention to the fact that members of the Indiana State Medical Association are always welcome to visit any of the clinics or ward rounds at

either the Indianapolis City Hospital or the University Hospital.

During the year certain changes in administration have taken place in the School of Medicine. Your committee believes that the unification of all of the departments of the School of Medicine under one administrative head will add greatly to its efficiency.

Your committee chairman attended the annual meeting of the Council on Medical Education and Hospitals of the American Medical Association, and the committee was represented by Dr. Howard Mettel at the meeting of the Associated State Postgraduate Committees which met in annual session at New York in June.

Your committee has been cooperating with the Bureau of Maternal and Child Health of the Indiana State Board of Health. All requests for scientific programs dealing with the subjects of pediatrics or obstetrics are referred directly to the Chief of the Bureau of Maternal and Child Health for setting up of these programs through the program committee or the secretary of the local county medical society.

During the past year the Bureau and the program chairman have endeavored to establish continuous regional types of programs, consisting of a series of afternoon and evening programs conducted weekly over a period of from four to six weeks, attempting to review the subjects of pediatrics and obstetrics. Approximately ten regional programs on the subject of obstetrics were conducted during the past year in various sections of the state. Four regional postgraduate programs in pediatrics were also held. These extramural types of medical education have proven very popular in these areas, and requests now at hand indicate a continuation of their popularity. These courses have for the most part been conducted by full-time instructors, and in many instances aided by out-of-state speakers.

The Bureau has continued to furnish individual programs for local county medical societies, but has found that the regional or continuous type of program is the most successful type.

Cooperation between the Department of Postgraduate Education of Indiana University School of Medicine and the foregoing named organizations has continued with the Bureau from time to time obtaining out-of-state speakers on pediatric and obstetric subjects for various post-graduate sessions conducted at Indiana University Medical Center.

The intramural program in post-graduate obstetrics at the Coleman Hospital, Indianapolis, wherein six post-graduate students reside for a period of two weeks for continuous study and observation, was offered to members of the Indiana State Medical Association during the past year. The attendance at these sessions was not encouraging, although those who attended gave highest commendation for the teaching content and the manner in which the courses were conducted. Despite the efforts of your committee and the Bureau of Maternal and Child Health to offer such an intensified program, the Indiana physicians seem reluctant to leave their practices for a period of two weeks in order to attend these worthwhile sessions. This is in contrast to reports from Ohio, Kentucky and Illinois where these types of courses have been offered and have been well attended. The Committee has no explanation for this seeming lack of interest to attend, unless it is due to the accessibility of post-graduate education to many parts of the state where there are medical teaching centers located within a radius of 75 miles. The Committee, however, is not discouraged in this project and will during the coming year offer six courses in obstetrics at the University Medical Center, as outlined in the September and October issues of THE JOURNAL of the Indiana State Medical Association. This year a registration fee of $10 will be required of all applicants. This fee is to be returned on satisfactory completion of the two-weeks' course.

The State Board of Health also has available to program committees throughout the state a rather extensive library of scientific films which may be loaned upon request. The Board of Health will furnish the operator, projecting machine, and screen for these showings. A list of these films will be sent to any program chairmen upon written request.

Program chairmen and secretaries of the local societies wishing to arrange for a regional type of post-graduate educational program should plan their programs early by sending their requests to the offices of the Indiana State Medical Association, or directly to the Bureau of Maternal and Child Health. It is urged that one county or committee be responsible for taking the initiative for making the local arrangements for these courses with the Bureau, and that they be planned on a district basis to include a minimum of five counties.

We are in the midst of a vast program of preparedness for national defense. Much needs to be done to coordinate medical and hospital activities. Medical teaching must continue so as to assure an adequate supply of physicians, nurses, technicians and public health workers. Our hospitals and public health departments must be planning for expansion and extraordinary burden of work to the end that any emergency may be met. Your committee asks the utmost of cooperation in this activity from every doctor in the state.

Respectfully submitted,

HERMAN M. BAKER, M.D., *Chairman*
O. O. ALEXANDER, M.D.
C. J. CLARK, M.D.
RALPH W. ELSTON, M.D.
E. E. PADGETT, M.D.
MERRILL S. DAVIS, M.D.

COMMITTEE ON PUBLIC RELATIONS

House of Delegates,

Indiana State Medical Association

Gentlemen:

Throughout the year your Public Relations Committee has been ready to take up any task which might be assigned to it by the Executive Committee, the Council, or the House of Delegates of the Indiana State Medical Association.

By tradition, this Committee was formed to function in a very specific capacity. We stand ready to serve the official groups of this organization whenever we are called upon to do so.

Respectfully submitted,

W. P. Garshwiler, M. D., *Chairman*
W. E. Jenkinson, M.D.
H. D. Pyle, M.D.
J. C. Glackman, M.D.
S. T. Miller, M.D.
H. P. Graessle, M.D.
R. H. Beeson, M.D.
C. F. Overpeck, M.D.

THE JOURNAL

House of Delegates,

Indiana State Medical Association

Gentlemen:

For the eighth successive year it becomes a pleasant duty to report concerning the fortunes of The Journal. Heretofore we have been content to discuss the yearly increase in the number of pages of reading matter, together with comment on our advertising income.

This year we believe it may be of interest to the membership to know that our circulation has shown a steady increase during these eight years. The following table presents an interesting tabulation.

1933 — 3,026
1934 — 3,069
1935 — 3,125
1936 — 3,166
1937 — 3,368
1938 — 3,411
1939 — 3,517
1940 — 3,571

It is well to remember that these figures do not include exchanges and extra copies mailed out in response to requests for same. In this connection we might say that sometimes we are unable to supply the demand for extra copies. Our paid subscription list, too, has shown a steady increase—this does not refer to our membership mailing list but to a sizable group over the country who seem to want our magazine and are willing to pay for it.

This year the Topic-of-the-Month feature was discontinued after a careful survey by the Editorial Board. However, several numbers have been devoted to special subjects, notably the "Conservation of Vision" and the "Military Medicine" numbers. The widespread interest in the latter number was sufficient to make worthwhile the effort in getting the material together. We have had requests for copies of this number from all over the United States!

Color on our cover has been used again this year. We believe that the added attractiveness this gives to our magazine justifies the small extra expense.

We would repeat a statement that has been made each year since we became connected with this publication—that The Journal is not an individual or even a group affair, for it is owned, operated, and published by the Indiana State Medical Association. The Journal attempts to reflect Indiana medical opinion; it is our intention to have The Journal bring to your desk each month all the worthwhile medical news of our state, with occasional references to what is going on in other states.

We hereby acknowledge the whole-hearted support we have had during the past year from the official family and from the membership at large; it is only through such cooperation that we may hope to carry on as we have done in the past. We modestly believe that we are sending you each month a live, up-to-the-minute magazine and we are more than proud of having some part in this work.

Some three months ago we were much disturbed by the "out-of-the-clear-sky" news that our Miss Toman, assistant editor and, in fact, the real Big Boss of The Journal, was to be married; we fussed and fumed about it for a time, then sat us down for a lot of worrying as to how we were to manage in the future. But the skies have cleared, and we are pleased to announce that Miss Toman (we cannot get used to saying Mrs. Skobba, so stick to the old title) will be on the job more or less of the time for some time to come. Miss Toman has been with The Journal for some eighteen years and has come to be of invaluable assistance, and we are sure that the membership at large, as well as Association officers and our advertisers, share our pleasure in having her remain with us for part time work.

Acknowledgements would be incomplete without mention of our printers. By and large, they have done a good job. On several occasions, notably at the annual meetings of the American Medical Association, we have heard many comments of a very favorable nature regarding the mechanical appearance of our magazine.

In concluding, your editor wishes to add his personal thanks for the many letters that have been received in regard to The Journal. It has been a pleasure to serve you to the best of my ability.

Respectfully submitted,

E. M. Shanklin, M.D.

COMMITTEE ON NECROLOGY THE HISTORIAN

House of Delegates,

Indiana State Medical Association

Gentlemen:

NECROLOGY

In the February or March issue of THE JOURNAL a complete list of the physicians who have died will be published again as was done this year. We will report at this time only the causes of death.

There were 95 physicians who died in the past twelve months, which is 22 less than last year. The causes of death given are as follows: coronary occlusion, 16; coronary thrombosis, 8; coronary embolism, 1; coronary sclerosis, 1; chronic myocarditis, 9; chronic endocarditis, 2; cardiac decompensation, 2; hypertensive heart disease, 4; acute heart failure, 2; organic heart disease, 1; subacute bacterial endocarditis, 1; acute dilatation of the heart, 1; rheumatic heart disease, 1; mitral valve disease, 1; cardiovascular renal disease, 2. This makes 52 findings of some sort of heart trouble. These were found in 43 men out of the total of 95, a little over 45 per cent.

Arteriosclerosis was found 15 times; cerebral hemorrhage, 14; softening of the brain, 1; carcinoma of the lung, 2; of the prostate, 1; mesenteric lymph glands, 1; rectum, 1; intestines, 4; stomach, 2; colon, 2; and general carcinomatosis of the abdomen, 1. Chronic nephritis was found 3 times; acute nephritis, 1; diabetes mellitus, 6; pulmonary tuberculosis, 2; pulmonary hemorrhage, 1; pulmonary edema, 2; and broncho-pheumonia, 5. Influenza was found 3 times; edema of the brain, 1; heat exhaustion, 1; erysipelas of the scalp, 1; abdominal aneurysm, 1; entero-colitis, 1; senility, 3; intestinal obstruction, 1; chlorosis, 1; pernicious anemia, 1; brain tumor, 1; overdose of morphine, 1; and auto accidents, 3.

Deaths from heart diseases continue to lead all other causes. Degenerative diseases come next and malignancy accounts for 14 deaths. The absence of lobar pneumonia from the list is worthy of notice and while I have not checked former records I suspect this is the first year this has occurred. Accidents were fewer this year.

HISTORY

As historian, there is little to report with the exception of the splendid contribution of Doctor Wishard toward the history of medicine in Marion County. In seven counties starts toward the collection of material have been made and quite a bit of current history has been filed from various counties of the state. The erection of a memorial by the physicians of Clay County to the pioneer medical men of their community is worthy of note and emulation by other counties.

Respectfully submitted,

JAMES B. MAPLE, M.D.

COMMITTEE ON SECRETARIES' CONFERENCE

House of Delegates,

Indiana State Medical Association

Gentlemen:

The fifteenth annual Secretaries' Conference of the Indiana State Medical Association was held Sunday, January 21, 1940, at the Columbia Club in Indianapolis, with 175 present, including several members of the A. M. A. official family.

The following representatives of the Indiana State Medical Association appeared on the program: Drs. Karl Ruddell, A. M. Mitchell, M. A. Austin, E. M. Shanklin, C. A. Nafe, Norman M. Beatty, J. W. Wright, and the attorney for the association, Mr. Albert M. Stump. Drs. Harry Brandman and M. J. Thornton with the executive secretaries, Mr. R. W. Waterson and Mr. Paul R. Waddell, conducted a symposium on the value of an executive secretary to a county society.

Out-of-state guest speakers included Dr. H. H. Turner, chairman of the Committee on Post-graduate Education of the Oklahoma State Medical Association; Dr. Peter Irving, secretary to the Medical Society of the State of New York, and the after-dinner speaker, Senator James E. Murray, of Montana.

Because of current interest in the subjects presented and with particular interest in the question of legislation pertinent to future medical practise, the meeting attracted wide attention among other societies. Representatives from The American Medical Association headquarters, from the Board of Trustees of the American Medical Association and from other state societies were present.

The meeting was widely quoted in the press, especially as to the speech by Senator Murray.

Dr. R. L. Hane, of Fort Wayne, was elected chairman for the Secretaries' Conference for 1941.

Respectfully submitted,

R. L. HANE, M.D., *Chairman*
W. M. DUGAN, M.D.
L. P. HART, M.D.
M. J. THORNTON, M.D.
C. G. KERN, M.D.
A. M. MITCHELL, M.D.

THE COMMITTEE ON VETERANS' AFFAIRS

House of Delegates,

Indiana State Medical Association

Gentlemen:

Although the program of preparing the medical profession of Indiana for any emergency has been delegated to the special M-Day (mobilization) Committee appointed at the Fort Wayne meeting in 1939, your Committee on Veterans' Affairs wishes to take this opportunity to endorse wholeheartedly and unequivocally the program of action taken by that committee and the officers of the Indiana State Medical Association.

With pride we point to the national recognition received by the Indiana State Medical Association at the annual session of the American Medical Association at New York for the foresightedness of the state association in sponsoring its military preparedness program.

We also congratulate the committee upon its energy in classifying the personnel of the medical profession for military purposes.

We congratulate the editorial board upon the Military Medicine issue of The Journal of the Indiana State Medical Association, the first issue of its kind by any medical journal in the country, which was published in September.

Your committee stands ready to aid in any way possible as directed by the officers of the state association and the House of Delegates and definitely recommends some sort of a program for medical military training.

Respectfully submitted,

C. C. Crampton, M.D., *Chairman*
C. C. Tucker, M.D.
M. F. Daubenheyer, M.D.
James A. Work, M.D.
H. O. Williams, M.D.

REPORT OF THE PERMANENT STUDY COMMITTEE ON HEALTH INSURANCE AND NATIONAL MEDICAL SITUATION

House of Delegates,

Indiana State Medical Association

Gentlemen:

It is not the wish or intent of this Committee, in its report, to infringe upon the province of any other Committee, particularly the Committee on Public Policy and Legislation. However, ours is a study Committee and as such can only present recommendations as a result of this study, and since it encompasses such a large field it is quite likely that it may overlap, or even conflict, with recommendations made by other Committees. Consideration of this fact, we feel sure, will be given by the members of the House of Delegates in reaching their conclusions.

NATIONAL MEDICAL SITUATION

Since the interest of the National administration and of politicians generally, during the past few months, has been consumed by the questions of war and re-election, there has been a noticeable let up in the preponderance of legislation directed toward effecting changes in medical practices. There has been a tendency toward more deliberate examination and temperate manipulation in marked contrast to the machine gun tactics of jamming through social legislation in the past.

However, the early part of the present congressional session was packed with measures designed to affect the medical profession in ways which clearly indicate the determination of the present National administration, and its socially minded advisers, to enter the practice of medicine and bring about its socialization and regimentation.

Generally the faults of the original Wagner bill (S. 1620) have been recognized, and it does not appear that it will ever be reported out, at least in its present form, by the Senate Committee on Education and Labor.

On February 1, 1940, following a message from the President to the Congress, Senator Wagner, on behalf of himself and Senator George introduced Senate Bill 3230 "to promote the National health and welfare through appropriation of funds for the construction of hospitals." Concurrently, Representative Lea introduced a companion bill in the House of Representatives, H. R. 8240. Co-incidentally, Senator Mead introduced Senate Bill, S. 3246, "to authorize loans for hospitals, water sewers, stream pollution control and related projects."

Since all of these bills are similar in character it has been patent that the Wagner Bill would most likely receive first consideration of the reference committees, and this has proven true since the Mead Bill is still held in the Senate Banking and Currency Committee, and the Lea Bill in the House Committee on Interstate and Foreign Commerce, while the Wagner Bill has progressed through various hearing stages and was reported out to the Senate, on April 30, in an amended form, by the Committee on Education and Labor. The bill retained some original provisions, inserted some of the provisions of the Taft plan, some of those of the representatives of the American Medical Association and hospital associations, and added other provisions of its own. Briefly it provides a six year program for construction and maintenance of hospital facilities, for which $10,000,000 is to be appropriated each year, and $500,000 for administrative expense for each of six fiscal years. The bill was passed by the Senate on May 30 without a dissenting vote and is now under consideration by the Committee on Interstate and Foreign Commerce of the House of Representatives.

Since there is no definite provision made for hospital projects, the leases of which shall have been cancelled; and since the term "hospital," as defined in the bill, includes health, diagnostic and treatment centers, it raises the question as to whether or not they may enter into the practice of medicine. The burden of responsibility is placed largely upon the Surgeon General of the Public Health Service particularly after the first year. In reporting the bill the Senate Committee on Education and Labor stated that the hospital building program was only a step toward the solution of health problems and designed to fit into a more comprehensive plan being formulated by the Committee. It is evident that hospitals so constructed are to serve as diagnostic centers with complete laboratory facilities, and these facilities are to be extended to county health officers in controlling epidemics, detecting carriers of infection and isolation and segregation of con-

tagious cases, as well as x-ray and sputum examinations. No attempt is made to determine the accessibility of prevailing hospitals, or to provide measures for improvement of roads and transportation facilities to utilize existing hospital beds. No consideration is given the fact that communities now having inadequate facilities and unable to provide suitable roads and transportation, will hardly be able to maintain 50 to 100 bed hospitals. No evidence is advanced to indicate that, in the normal course of events, private hospital construction will not meet community needs. The Committee assumes that it is the function of the government to preserve the person as well as the property of man, and that no national progress can occur without governmental supervision of the health and welfare of the citizens. This program places the government in competition with existing private hospitals and indicates another effort on the part of the government to actively enter the practice of medicine.

It was the consensus of opinion of the Governor's Committee on Hospital Insurance of this State that present facilities indicate that there is no community in the State farther than thirty miles from a hospital, and that the greatest need in Indiana is for more adequate financing and equipping of present hospitals. Present needs appear confined to increases in tuberculosis, psychopathic, and communicable disease beds, and hospitalization is purely a local problem, except for State maintenance of insane hospitals and two State hospitals for the care of tuberculosis cases. Consequently the Governor's Committee was unable to recommend the building of any general hospitals at this time, although leaving the matter open in case some community felt there was a local need for a general hospital under this plan.

WE RECOMMEND THAT THE INDIANA STATE MEDICAL ASSOCIATION GO ON RECORD AS OPPOSED TO THE BUILDING OF ANY GENERAL HOSPITALS UNDER THIS GOVERNMENTAL PLAN IN INDIANA. HOWEVER, WHERE THE NECESSITY IS SHOWN, WE ARE IN ACCORD WITH THE UTILIZATION OF GOVERNMENTAL FUNDS FOR REPLACEMENT OR ADDITION TO EXISTING FACILITIES SHOULD THIS BE DEEMED EXPEDIENT BY HOSPITAL AUTHORITIES.

On March 19, 1940, Senator Henry Cabot Lodge introduced a bill (S. 3630) to amend the Social Security Act to provide for funds up to $40.00 per year for medical, dental and hospital services to unemployed persons receiving unemployment insurance benefits or to members of the families of such persons. It also provides funds for the States to match and expend, through suitable organizations, for x-ray diagnosis, respirators and certain drugs, hormones, vitamins and vaccines for the indigent.

That such a bill is objectionable is evident from the fact that those eligible would tend to seek the roentgenologist, rather than the general physician for diagnosis of their ailments and so often without benefit or value in their particular case. In the matter of furnishing drugs, particularly the expensive ones, it would appear that this must be considered a fault of local relief organizations and correctable by intelligent administration. The bill further provides for taking of money from the social security funds and using it to furnish care of the indigent without regard to whether the individuals benefiting had ever contributed to the funds. Since the social security funds are raised by taxes on the wages of workers and employers to provide for the former in their old age, it is, to say the least, objectionable that such diversion be made. If local medical care of the unemployed and indigent needs financial support, it should receive it through local general taxation rather than securing it from social security levies. The bill is but another wedge in the entrance of the Federal Government into the field of medicine, and while it does not approach the Wagner Bill in scope, it is similar in taking into the province of federal administration that which has always been a local function. This bill is still under consideration by the Senate Committee on Education and Labor.

WE RECOMMEND THE INDIVIDUAL AND COLLECTIVE OPPOSITION OF THIS MEMBERSHIP TO THE PASSAGE OF THIS BILL, AND SUGGEST THAT A LETTER TO THIS EFFECT BE SENT TO THE SENATE COMMITTEE ON EDUCATION AND LABOR AND TO OUR REPRESENTATIVES IN CONGRESS DEFINING THIS VIEW.

On March 25, 1940, Senator Capper introduced in the Senate a health insurance bill, (S. 3660) sponsored by the American Association for Social Security through Abraham Epstein. This is a perennial habit and embodies essentially the same provisions of compulsory and voluntary health insurance as previous editions. It proposes a federal appropriation of $50,000,000 for the fiscal year ending June 30, 1941, and thereafter as much as necessary to induce the states to set up a combined program of compulsory and voluntary health insurance. The administration of the plan is lodged in a central state board, a state commissioner of health insurance, and a statewide system of local councils and administrative offices. Needless to state it embodies all of the objectionable features of such a compulsory system and paves the way for a highly bureaucratic set up. At present it is pending in the Senate Committee on Education and Labor.

WE RECOMMEND THAT THE INDIANA STATE MEDICAL ASSOCIATION INDICATE ITS OPPOSITION TO SUCH A PLAN TO THE SENATE COMMITTEE ON EDUCATION AND LABOR AND TO ITS REPRESENTATIVES IN CONGRESS.

Numerous other bills have been presented to the Congress embodying measures designed, in greater or less degree, to affect the practice of medicine, and which serve all too clearly to indicate the definite trend of federal government to enter into and restrict the practice of medicine. Witness measures directed toward additional facilities for the tuberculous; care of and study of pneumoconiosis; aid for indigent non-residents; aid for the blind; aid for the deaf; aid for the physically disabled; extension of veteran's benefits; new hospital facilities for veterans to the number of 27 new or addi-

tions to present facilities; numerous extensions of hospital and medical services to various governmental branches and employees; the creation of a United States Department of Health; the erection and maintenance of a United States Medical College; extension to the States of aid in cancer diagnosis, treatment and control; funds for research on colds, influenza and pneumonia; funds for research in epilepsy; the creation of a Federal Unemployment Assistance Administration, and medical and surgical relief for its employees and the unemployed; various measures for control of water pollution and various and numerous others. Apparently this has been the year for the omnipotent politician to cash in on whatever prestige he can garner from the introduction of weird and fantastic efforts to solve the medical problems of his constituents, and always embodying the creation of new or delegating existing governmental bureaus to control them.

It seems fair to inquire that if there is so much necessity for this type of medical legislation, why it would not be more expedient and economical to provide funds to the American Medical Association which could assume the investigation of such matters, determine their necessity and administer their development. This would free the whole problem of political interference and assure a fair and impartial solution of these questions. Certainly their experience, knowledge and high principles would be reflected to the public welfare, but this is too much to anticipate from political administrators. Even the appointment of a permanent advisory committee to cooperate in such matters does not appear acceptable. All of these bills are still pending in reference committees and we can only hope for their demise there.

WE HAVE NO RECOMMENDATIONS TO MAKE IN THEIR REGARD BEYOND THE MAINTENANCE OF AN ALERT APPRECIATION OF THE FACT THAT MANY OF THEM ARE DANGEROUS AND AS SUCH SHOULD RECEIVE OUR INDICATION OF OPPOSITION SHOULD THEY BE BROUGHT FORTH.

In March of this year the United States Court of Appeals reversed a District Court decision by Justice Proctor that Medicine was a learned profession and therefore not within the scope of the Sherman Anti-Trust Act, and thereby upheld the indictment of the American Medical Association, remanding the case to the District Court for trial on its merits. Following this action a petition was carried to the Supreme Court to review this decision. The Supreme Court held with the government in deciding that a trial of the case should be made in order that all facts might appear in the record and therefore declined to review the decision of the Court of Appeals at this time. This does not mean that the Supreme Court approved the decision of the Court of Appeals, but means only that the Supreme Court is satisfied that the case should be tried first in the District Court on its merits. Therefore in the event of an adverse decision in the District Court, the issue would still be open for submission to the Supreme Court as to whether or not the practice of medicine is a trade within the meaning of the Sherman Anti-trust Law.

It is incredible to conceive that an organization which has built its progress upon the cooperation of its members in self-discipline, the constant elevation of its standards of practice, and its continuous efforts in the cause of scientific medicine, and its unselfish willingness to provide over a million dollars a day in charitable activities should be subjected to the discrediting indictment for which it must stand trial, probably this fall. We take hope in the feeling that justice alone cannot be administered by political departments, and we continue to express justification in our belief that our aims and purposes can be best administered and accomplished through our own cooperation in maintaining the high standards of our profession.

A great deal of agitation has been felt during the past year with reference to the question of the emigré physician, and emphasis has been placed on the necessity of restricting the licensure of foreign physicians in order to protect the medical profession as well as the public. Much has been stated on both sides of this question. The fact remains that at least 1000 such physicians have been located, principally in four Eastern seaboard States where licenses can still be obtained, and upward of 2000 more remain to be settled. Forty-four States have set up restrictions limiting the settlement of these emigrés. A National Committee for Resettlement of Foreign Physicians has been organized in an attempt to solve this situation. Connecticut, Illinois, Maryland, Massachusetts, New Jersey and New York have functioning committees, and co-operating committees have been formed in California, Georgia, Louisiana, Missouri, North Carolina, Ohio, Pennsylvania, Texas and Virginia.

In June, 1938, the House of Delegates of the American Medical Association recommended that citizenship be made a pre-requisite to medical licensure, and in 10 states this is mandatory by statute, and by regulation of state medical boards in eighteen. Indiana does not require citizenship either by statute or regulation. However, it does require, by regulation, that licensure be restricted to graduates of approved American medical schools to the extent that the senior year must be completed in a Class A medical school in the United States. Pressure has been brought to bear from various sources to effect changes in this requirement. We are fully cognizant of the fact that many of these emigrés possess ability and experience far above the average, and that many of them have occupied high positions in the world of medicine. We also know that there are some 5,000 of our own citizens graduated each year from medical schools, and while not holding up retaliation as an adequate reason for restriction, we cannot overlook the fact that prior to the present catastrophy in Europe it was practically impossible for an Ameri-

can to secure a European license to practice medicine.

WE RECOMMEND THAT THE LEGISLATIVE COMMITTEE PREPARE AN AMENDMENT TO THE MEDICAL PRACTICE ACT REQUIRING CITIZENSHIP OF EMIGRE' PHYSICIANS. THAT TEMPORARY LICENSES MAY BE ISSUED TO SUCH PHYSICIANS FOLLOWING THE TAKING OUT OF FIRST PAPERS AND SUBJECT TO REVOCATION IF THE PHYSICIAN DOES NOT BECOME A CITIZEN AT THE EXPIRATION OF THE PERIOD REQUIRED BY THE STATE DEPARTMENT, AND SUBJECT ALSO TO THE STATE BOARD REQUIREMENTS AND REGULATIONS NOW IN FORCE.

During the past year we have seen the organization of the National Physicians Committee for the Extension of Medical Service. Originally started by two eminent physicians it has rallied to its support men of unquestioned ability and repute, who believe that the service of education of the people regarding the accomplishments and ideals of American medicine was a most necessary and valuable aid in combating the discrediting propaganda of political and socialized medicine. Its executive board and central committee are composed of men whose fidelity to the principles of organized medicine has never been doubted. This organization set out to make possible the provision of medical care to the indigent and those in low income groups, and to counter the destructive propaganda against the medical profession by familiarizing the public with the facts in connection with the methods and the achievements of American Medicine. They have advocated the maintenance of independent private medical practice, the preservation and extension of our independent hospital system, the centralization of all Health Services of the Federal and State governments, the determination of local health requirements and the use of grants-in-aid only under conditions of locally demonstrated needs, and the control and disbursement of public health funds by administrators locally appointed or locally elected. These advocations were to be accomplished through the press, radio and public meetings. Funds for this organization were to be supplied by individual subscriptions chiefly from the medical ranks.

The American Medical Association has no direct connection with this organization because of a combination of reasons. These include the necessity "for speedy adaptation to a set of conditions that are constantly changing and varying widely according to areas involved," something the American Medical Association cannot accomplish since its operations are based on long-range planning, and it would lose much of its effectiveness if impelled to changes of policy to meet emergency situations. Again it has been founded and operated as a nonprofit, scientific, educational foundation, and as such has been granted exemption from Income and Social Security taxes. Any change from its established status would mean forfeiture of this exemption. Finally all groups allied to the medical profession, such as nurses, hospitals, pharmacists, retail druggists and pharmaceutical houses are vitally interested in the solution of the problems confronting us. It would obviously create a most critical situation were the American Medical Association placed in the position of accepting contributions for support from those whose products are now subjected to analysis and recommendations of approval or disapproval. The National Physicians Committee "has assumed the great responsibility of attempting to co-ordinate the interests and activities of all interested in finding a practical solution."

So far publicity has been secured through two double page advertisements in the Saturday Evening Post, and through the distribution of over two million letters, booklets and folders, and full page reproductions of the Post material in many local newspapers.

WE RECOMMEND THAT THE INDIANA STATE MEDICAL ASSOCIATION APPROVE THE PURPOSES AND AIMS OF THE NATIONAL PHYSICIANS COMMITTEE FOR THE EXTENSION OF MEDICAL SERVICE, AND IS IN ACCORD WITH THE INDIVIDUAL CONTRIBUTIONS OF ITS MEMBERS TO ITS SUPPORT IN PROPORTION TO THEIR ABILITY.

At the June meeting of the American Medical Association in New York we witnessed the largest gathering of medical men ever recorded in history, some 12,846 physicians indicating by their presence, their keen interest in medical matters.

The most significant action taken by the House of Delegates was with regard to medical preparedness. It pledged complete cooperation with the constituted authorities in the matter of preparation to meet any emergency arising out of the possibility of war. The Committee on Medical Preparedness was formed and you are familiar with the steps already taken to meet any emergency with which the government may be confronted. You are also familiar with the fact that at the Fort Wayne meeting of the Indiana State Medical Association a resolution was adopted constituting and empowering a Committee to act in liaison with proper military and civil authorities and veteran's organizations, to make a study for and prepare a detailed program for medical cooperation and preparedness in the event of the necessity for mobilization. Thus Indiana medicine has anticipated the present preparations and led the way in expressing its willingness to cooperate.

HOWEVER, PREPAREDNESS IS ONE THING, PERMANENT REGIMENTATION IS ANOTHER. WE ADMIT AND ENDORSE THE NECESSITY FOR REGIMENTATION FOR PREPAREDNESS TO MEET AN EMERGENCY, BUT INSIST UPON A RETURN TO OUR PRESENT STATUS WHEN THE EMERGENCY HAS PASSED.

HEALTH INSURANCE

During the past year a great deal of activity has been witnessed in the various States concerning the questions of group hospitalization and medical service plans. Compulsory health insurance bills, similar to the Capper-Epstein bill, were presented in California, Connecticut, Massachusetts, New York, Pennsylvania, Rhode Island, and Wisconsin. All failed of enactment. In contrast, voluntary medical service plans are in various stages of development in Arizona, California, Connecticut, District of

Columbia, North Carolina, Massachusetts, Idaho, Michigan, Missouri, New Jersey, New York, Ohio, Oregon, Pennsylvania, Utah, Vermont and Washington. In some, progress has advanced little beyond the endorsement of the House of Delegates of the State Medical Associations and the appointment of committees to prepare plans. Special enabling legislation has been obtained in Connecticut, Michigan, New York, Pennsylvania and Vermont. In most of the others opinions have been obtained from the insurance commissioner, or others, that such plans are permissible under existing legislation. These plans, in general, provide for non-profit corporations, authorized by a designated State agency, to operate on a pre-payment basis, non-profit medical service plans whereby stated medical services and care may be rendered at the expense of the corporation to subscribers to such plans and their dependents. Free choice of physician is maintained, and the corporation pays the bills to the physicians chosen by the subscriber. In certain instances (New York, Connecticut and Utah) the subscriber is reimbursed by the corporation for the amount expended for such services up to certain limits.

During the year voluntary hospital service plans were enacted in Alabama, Connecticut, Florida, Iowa, Maine, Michigan, New Hampshire, New Mexico, Ohio, Rhode Island, South Carolina, Texas, Vermont and Wisconsin, authorizing non-profit corporations to provide hospital care on a pre-payment basis to members or subscribers. You will recall that a similar measure enacted in Indiana was pocket vetoed by the Governor, who shortly thereafter formed a Committee to study ways and means to set up such a plan within existing laws. This committee was forced, because of existing State Insurance laws, to recommend proper legislative action before such a plan could be set up.

You will recall that at the 1939 meeting of this organization in Fort Wayne, approval of the House of Delegates was again given to the principle of non-profit hospital insurance plans when properly safeguarded.

Since the American Medical Association and the Indiana State Medical Association have recorded their approval of non-profit hospital insurance plans, subject to certain safeguards, and since we understand that the Governor's Committee has agreed to draw up such legislation to meet objections advanced for the failure of the 1939 bill, and will present this new bill at the next session of the legislature, we have no further recommendation to make with regard to the hospitalization phase of this problem.

HOWEVER, WE FEEL THAT OUR ASSOCIATION SHOULD HAVE CLOSER CONTACT AND CO-OPERATION WITH THE GOVERNOR'S COMMITTEE, AND PARTICULARLY SO IN THE WORKING OUT OF ANY PLAN THAT MAY BECOME OPERATIVE, IF AND WHEN SUCH LEGISLATION IS PASSED. THIS ACTION FOR A HOSPITALIZATION PRE-PAYMENT PLAN WAS ORIGINALLY INSTITUTED BY THE INDIANA STATE HOSPITAL ASSOCIATION WITH THE CO-OPERATION OF THE INDIANA STATE MEDICAL ASSOCIATION. THE POLITICAL ASPECTS OF HAVING THIS NEW BILL PRESENTED BY THE GOVERNOR'S COMMITTEE IS RECOGNIZED, AND WE RECOMMEND THAT ANY SUCH BILL TO BE PRESENTED SHOULD HAVE THE APPROVAL OF OUR EXECUTIVE COMMITTEE, AND SHOULD BE PRESENTED AS A BILL INSTITUTED AND ENDORSED BY THE INDIANA STATE HOSPITAL ASSOCIATION AND THE INDIANA STATE MEDICAL ASSOCIATION.

You will recall that the House of Delegates at Fort Wayne approved a recommendation of its reference committee endorsing non-profit medical care plans giving benefits in the form of cash indemnity and not medical service. A recent communication from the Executive Committee indicates their feeling that this endorsement should be reaffirmed at the French Lick session, and that if such plans are to be motivated, the House should definitely and specifically instruct the legislative committee to prepare a bill to be presented at the 1941 session of the legislature.

Recent experiences in the northern part of the State indicate all too clearly that if we do not advance such plans they will be advanced for us and most likely in an unsatisfactory manner. One society in a large industrial area was given the ultimatum by the C. I. O. organization, comprising a family membership of approximately 50,000 people, of either providing a suitable low cost non-profit health insurance plan, or witnessing the erection of a group clinic and hospital to service their members and families. Through meetings with their officers and committees the situation for the present has been alleviated, and their cooperation has been promised in the securing of passage of laws to permit the operation of such plans. It is evident that if this body does not take the initiative in presenting to the next session of the legislature a bill authorizing the operation of voluntary non-profit medical plans, other interested organizations will, with undoubted dissatisfaction to the medical profession.

Moreover the demand for this type of protection is constantly growing, particularly as regards surgical hazards, and we feel that the presentation of our own plan would do much to obviate the threatening aspect of State and, or, Federalized medicine.

We do not believe that this House should go on record as only endorsing non-profit medical care plans giving benefits in the form of cash indemnity and not medical service. In the case of hospitalization we have already approved and reaffirmed the approval of hospitalization plans on a service basis providing they conform to the ten points laid down by the House of Delegates of the American Medical Association and conform to state laws. We further have indicated that such hospitalization plans are not to include medical services. This should, and no doubt will, be incorporated in any plan which becomes effective. In our opinion this is a distinct and separate measure from medical care plans. Therefore we cannot concur in the belief that medical care plans must be limited to a cash indemnity basis. We believe that they can be set up satisfactorily on a medical service basis, and be properly safeguarded. We believe that the ultimate plan to

be adopted should result from a careful study of all existing plans and their experiences, as well as our own local conditions, and that from this study the best plan should be presented by whatever Committee has it in charge, and that they should not be hampered in this matter by limiting their considerations to a cash indemnity basis alone. Moreover, we believe that medical expenses payable directly to the physician will secure greater cooperation and obviate much dissatisfaction. We are further of the opinion that should such an act be presented to the legislature that it should include a provision, among others, limiting the operation of such a plan to a medical service corporation approved by a recognized medical society having not less than 2,000 members holding licenses to practice medicine. Such a safeguard against unwarranted fleecing of the public by irresponsiblie individuals or organizations has been set up in the New Jersey plan, and Michigan is similarly protected. At the present time New York is having a great deal of trouble because such a provision was not incorporated. Of course the medical association must stand the preliminary loss of time and money expended in such an experimentation, if there is a loss, but no political, financial or occupational vested interest will be left behind to hamper the expansion, restriction, alteration, abolition or further experimentation of such a plan.

WE RECOMMEND THAT THE HOUSE OF DELEGATES AFFIRM ITS ENDORSEMENT OF VOLUNTARY NON-PROFIT MEDICAL PLANS ON A CASH INDEMNITY BASIS AS WELL AS ON A MEDICAL SERVICE BASIS, PROPERLY SAFEGUARDED AND IN CONFORMITY WITH THE PRINCIPLES OF THE AMERICAN MEDICAL ASSOCIATION AND OUR OWN STATE LAWS, AND THAT THEY DEFINITELY AND SPECIFICALLY INSTRUCT THE LEGISLATIVE COMMITTEE TO PREPARE A BILL TO THIS EFFECT TO BE PRESENTED AT THE 1941 SESSION OF THE LEGISLATURE, AND THAT IN THE EVENT OF ITS PASSAGE THAT THE COUNCIL BE EMPOWERED TO EMPLOY A FULL TIME EXECUTIVE, FAMILIAR WITH THIS TYPE OF INSURANCE, TO WORK OUT AND ADMINISTER THE DETAILS OF SUCH A PLAN IN CONJUNCTION WITH WHATEVER COMMITTEE MAY BE DESIGNATED BY THE PRESIDENT TO DO SO, AND THAT THE PLAN ULTIMATELY ADOPTED BE PRESENTED TO THE HOUSE OF DELEGATES FOR ENDORSEMENT AND APPROVAL AT A REGULAR OR SPECIAL MEETING.

Referred to this Committee by the Executive Committee, for study and recommendation, was a suggestion by Dr. L. W. Vore of Plymouth, concerning the organization of a Doctor's Mutual Benefit Association, to be conducted through the State Headquarters office utilizing the County Societies for the collection of premiums and distribution of benefits, and providing accident and health protection for the doctors. It was estimated that on a yearly premium of $75.00, benefits in the amount of $200.00 per month could be paid, for 12 months, to sick and disabled physicians.

We do not believe it is the function of this Association to enter into such an insurance plan. Policies are already available through existing, duly licensed insurance companies that will provide much greater coverage at lower cost and for a longer period of time.

WE DO NOT BELIEVE THE ASSOCIATION SHOULD UNDERTAKE THE HAZARDS INCUMBENT ON THE ADOPTION OF SUCH A PLAN.

Likewise referred to us was the group hospitalization plan adopted by the Chicago Medical Society for its members. Upon the payment of $10.00 yearly the member is provided with indemnity at the rate of $6.00 per day for hospital confinement, up to a period of 91 days, regardless of the type of disease or accident. Insurance is carried by an old line legal reserve company.

THIS PLAN POSSESSES DEFINITE MERITS, HOWEVER WE DO NOT RECOMMEND THE ADOPTION OF SUCH A PLAN AT THIS TIME IN THE BELIEF THAT SHOULD OUR CONTEMPLATED HOSPITALIZATION BILL GO THROUGH, THAT THERE MAY BE SOME PROVISION FOR GROUPS OF PHYSICIANS TO SHARE IN ITS BENEFITS SHOULD THEY SO DESIRE.

At the meeting of the House of Delegates of the American Medical Association in New York, a resolution was adopted appointing a committee to make a study of the problem of aid to needy members of the profession and the establishment of a National fund for this purpose. The Committee so appointed was empowered to appoint a sub-committee of three from each State Association to carry on similar studies in their respective States. All reports are to be combined and presented at the next meeting of the American Medical Association.

This is a proposal with which we are in hearty accord. Pennsylvania has had a benevolent plan in operation for 37 years, and in May, 1940, Illinois established a benevolent fund to care for its needy members and their widows or widowers.

IN VIEW OF THE ACTION TAKEN BY THE AMERICAN MEDICAL ASSOCIATION TO PLACE THIS MATTER ON A NATIONAL BASIS, WE BELIEVE NO FURTHER CONSIDERATION IS NECESSARY HERE, OTHER THAN TO WHOLE HEARTEDLY ENDORSE THIS ACTION AND TO INSTRUCT THE COMMITTEE APPOINTED FOR THIS STATE TO REGISTER OUR APPROVAL IN THEIR REPORT TO THE AMERICAN MEDICAL ASSOCIATION.

It has appeared to us that the extensive study required of our Committee to keep in contact with even the high lights of many problems and questions involved in health insurance and the National Medical situation, as witness this voluminous report, could be much better accomplished if this work were divided.

Therefore, we recommend that the Permanent Study Committee on Health Insurance and National Medical Situation be separated into two committees, one to be known as the Permanent Study Committee on the National Medical Situation, and the other to be known as the Committee on Hospitalization and Health Insurance.

Respectfully submitted,

N. K. FORSTER, M.D., *Chairman*
W. U. KENNEDY, M.D.
A. C. YODER, M.D.
J. M. FLEMING, M.D.
ERNEST RUPEL, M.D.
M. V. KAHLER, M.D.

COMMITTEE ON HIGH SCHOOL ATHLETICS

House of Delegates,
Indiana State Medical Association

Gentlemen:

This committee is glad to report that progress is being made steadily towards our most important goal. This goal is the proper examination and supervision of those boys engaged in competitive athletics. Nothing is more important than to be certain that these boys are physically fit for the strenuous games they are called upon to play. Fortunately, the doctors in charge of these matters in various squads over the state are aware of the responsibility and have done the job well.

In last year's report, we called attention to the undesirability of out-season games when the contestants are not in training. We feel strongly that no good purpose is served by these contests which are in the nature of a pure and simple exploitation.

Respectfully submitted,

W. D. Little, M.D., *Chairman*
O. H. Bakemeier, M.D.
H. C. Wadsworth, M.D.
G. A. Thomas, M.D.
D. W. Paris, M.D.
J. E. McMeel, M.D.
Neal E. Baxter, M.D.

COMMITTEE ON MENTAL HEALTH

House of Delegates,
Indiana State Medical Association

Gentlemen:

The Committee on Mental Health of the Indiana State Medical Association begs to make the following report of activities during the year 1939-40:

No very pressing or urgent problems have been presented to the Committee during the year. One formal meeting was held February 28, 1940. Many minor questions have been brought to our attention but were disposed of without reference to the Committee as a whole, or were deferred to a later date.

The principal object of the meeting above mentioned was to consider certain requests made by Dr. Harriett O'Shea, president of the State Psychological Association. It is the desire of the State Psychological Association to provide for the licensing of properly qualified psychologists by the State Board of education to serve as psychologists in the public schools. The approval of such a plan was asked of the State Medical Association. After much discussion, action was deferred to a later meeting. In the meantime, considerable valuable information has been received from other states in which such a plan is operative or contemplated.

In last year's report attention was called to the establishment of psychiatric clinics throughout the state under the supervision of the Department of Public Welfare. These clinics have grown in size and number. Fourteen are now functioning, serving eighty counties. No complaints have reached this Committee as to the operation of these clinics, and we feel confident that with Dr. George C. Stevens as director, these clinics will continue to render excellent service and will conform to strictly ethical principles such as were previously outlined.

The Advisory Committee of the Department of Public Welfare continues its function as a liaison group between that Department and the State Medical Association. Due to the activities of this Committee, the State Society for Mental Hygiene has been reorganized and held its first meeting in the spring of 1940.

The State Hospitals, though still understaffed and overcrowded, continue to do excellent work.

This Committee has on a number of occasions called attention to the delay in transferring committed patients to the state hospitals. Oftentimes there is an interval of days or even weeks between the filing of commitment papers and the actual admittance of the patient to the hospital. Some of the counties have facilities for proper hospitalization in local hospitals. Otherwise, disturbed patients must be cared for in the county jail. A state psychopathic hospital would eliminate this unfortunate situation, but at present the prospects for such an institution are not very encouraging. There are two other possible solutions; first, that counties be required to hospitalize committed patients in a local or nearby hospital having proper facilities until transfer to the state hospital, or, second, that the Commitment Law be so altered as to provide emergency admittance to the State Hospital pending the formal committal proceedings. As these plans entail some changes in the present law, it is recommended that this question be referred to the Judicial Committee for consideration.

In the fall of 1939, Dr. Max Bahr resigned as head of the Department of Neuropsychiatry of the Indiana University School of Medicine. He was succeeded by Dr. David Boyd, from the University of Michigan. Dr. Boyd has a full time service, devoting his entire activities to teaching. In addition, Dr. Alexander T. Ross has been appointed a full time assistant professor of neurology, and Dr. C. Herbert Cronich has been given a fellowship in child study and guidance. With these additions to the regular teaching staff, the subject of neuropsychiatry will certainly be amply covered.

The Committee feels that during the past year there has been a steady advancement in the study and care of the mentally ill. There is, of course, much more to be accomplished in the way of public education, out-patient clinics, and greater and more adequate hospital facilities.

Very respectfully,

Larue D. Carter, M.D., *Chairman*
A. M. De Armond, M.D.
L. P. Harshman, M.D.
H. J. Norton, M.D.
H. M. Baker, M.D.
John H. Hare, M.D.
Max Bahr, M.D.
C. L. Williams, M.D.
E. Rogers Smith, M.D.

STATE FAIR COMMITTEE

(No report received)

COMMITTEE ON TRAFFIC HAZARDS

House of Delegates,

Indiana State Medical Association

Gentlemen:

The activities of the Committee on Traffic Hazards has been limited to the work of the Chairman on the Indiana Traffic Safety Council, appointed by the Governor two years ago, and of which Mr. Paul G. Hoffman, president of Studebaker Corporation, is president.

It is this organization that drafted the amendments to traffic laws passed by the last legislature.

This Council is composed of about thirty members, selected from various civic and professional groups of which the medical profession is one.

It appears that with the improvements in road construction and automotive engineering, traffic hazards increase in direct ratio. The first six months in 1940 in Indiana showed an increase of 20.7% in total fatalities. The reason for this seems clear. Unreasonable speed is the bottle neck preventing a reduction in traffic hazards.

Respectfully submitted,

MURRAY N. HADLEY, M.D., *Chairman*
C. S. BLACK, M.D.
G. V. CRING, M.D.
D. C. MCCLELLAND, M.D.
J. M. PALM, M.D.
M. D. WYGANT, M.D.

STATE BOARD OF HEALTH LIAISON COMMITTEE TO DEAL WITH THE SOCIAL SECURITY ACT

House of Delegates,

Indiana State Medical Association

Gentlemen:

The State Board of Health Liaison Committee to Deal With the Social Security Act submits the following report:

The activities of the Bureau of Maternal and Child Health of the Indiana State Board of Health consulted your committee freely throughout the year and has continued a close cooperation with your committee.

On March 27, 1940, a meeting of the entire committee was held with the Board of Maternal and Child Health. The following points have been covered throughout the year:

1. Extension of post-graduate medical education in pediatrics and obstetrics.

2. Establishment of medical advisory committees in the local county medical societies to work with and to direct the program of county public health nurses.

3. Continued expansion of the state-wide program of immunization and vaccination.

4. Establishment of nursing home delivery services in four additional counties, making a total of seven counties now having the services of especially trained nurses to assist the doctors at their home deliveries.

5. The cooperation with medical societies in their programs for the establishment of child health conferences and prenatal clinics.

6. Continued cooperation with the State Department of Public Welfare (Division of Dependent Children) in the inspection and licensing of maternity homes and hospitals.

7. The establishment of a state-wide program for the care of the new born and premature infant.

8. Surveys on child health programs, school health services, immunization programs, vision and hearing programs, etc.

9. County public health nurses conduct generalized nursing services in various counties over the state, devoting about 90 per cent of their time to child and maternal health services.

10. State-wide program in lay health education.

11. Educational and reparative program in children's dentistry, cooperating with the Indiana State Dental Association and Indiana University School of Dentistry.

12. The establishment of a state-wide and regional program in nutrition.

13. Continued cooperation with health programs of non-official health agencies, and state-wide agencies interested in the better health of the mother and child.

14. Lastly, continued study of infant and maternal mortality rates of Indiana. (Reference is made to last year's report of this Sub-Committee, as appeared in the June, 1940, issue of THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION. H. F. Beckman, M.D., Indianapolis, is chairman of this Sub-Committee.)

Details of any of the activities covered may be found in the files of the Bureau of Maternal and Child Health of the Indiana State Board of Health.

It is recommended to the Indiana State Medical Association that the name of the Committee be changed from that of "State Board of Health Liaison Committee to Deal With the Social Security Act," to that of, "Advisory Committee of the Indiana State Medical Association to the Bureau of Maternal and Child Health of the Indiana State Board of Health." The reason for this suggestion is that the present name is conflicting and too broad in scope, since other committees of the State Medical Association deal with other provisions of the National Social Security Act.

Respectfully submitted,

E. O. ASHER, M.D., *Chairman*
J. C. CARTER, M.D.
W. R. SPRINGSTUN, M.D.
C. J. ROTHSCHILD, M.D.
K. T. KNODE, M.D.
H. R. WILLAN, M.D.

SUB-COMMITTEE TO STUDY MATERNAL MORBIDITY AND MORTALITY RATES FOR INDIANA

House of Delegates,
Indiana State Medical Association

Gentlemen:

The Sub-Committee to Study Maternal Morbidity and Mortality Rates for Indiana begs to submit the following report:

1. An analysis of maternal mortality and the causes leading thereto in Indiana for the year 1939 was made and the result published in The Journal of the Indiana State Medical Association, June, 1940.
2. Since infant mortality of the first thirty days of life is so intimately associated with obstetric practice, this subject was included in the study and report.
3. We recommend that the name of our committee be changed to include neonatal mortality and thus read, "Committee to Study Maternal, Fetal, and Neonatal Morbidity and Mortality Rates for Indiana."
4. Comparing the reports of 1938 and 1939, it is seen that the mortality rate for the two years remains nearly the same,—3.7 and 3.6 per 1,000 live births.
5. Scrutiny of these reports will reveal to all interested members the causes for the preventable deaths and how to guard against such calamity.
6. Records of over 4,000 maternity cases in one of the institutions of Indiana show a maternal mortality of less than 2 per 1,000 live births, proving that "It can be done in Indiana."
7. As a means to this end, we endorse the recommendations of this committee as published in the April, 1940, issue of The Journal of the Indiana State Medical Association and again urge:
 a. The appointment by each County Medical Society of a Committee on Maternal Welfare.
 b. An evening program each year devoted to the study of the problem of maternal welfare as it exists in their community.
 c. An annual study by this committee of maternal and infant mortality records of their county. This will help to remedy conditions which frequently are contributory factors to mortality.
 d. The same program applied to fetal mortality.

We express our appreciation to the members of the Association for their cooperation and again desire to emphasize that this survey is not an investigation of personal practice. It is, rather, a quest for preventable factors which contribute to infant and maternal mortality, knowing that these will then be remedied through the efforts of the local medical society.

Letters have been received by your Committee commending the doctors of Indiana for their activities toward reducing maternal mortality and requesting questionnaire blanks upon which to pattern a similar survey in other states.

We gratefully acknowledge the assistance given us by the Bureau of Maternal and Child Health and the Buerau of Vital Statistics of the State Board of Health.

Respectfully submitted,
H. F. Beckman, M.D., *Chairman*
J. C. Carter, M.D.
F. J. Hudson, M.D.
C. P. Huber, M.D.

REPORT OF LIAISON COMMITTEE WITH INDIANA CRIPPLED CHILDREN'S BUREAU

House of Delegates,
Indiana State Medical Association

Gentlemen:

The Liaison Committee for the Division of Services for Crippled Children of the State Department of Public Welfare presents the following report of the activities of this division.

The following report of volume of service rendered by the Division of Services for Crippled Children of the State Department of Public Welfare during the fiscal year, ending June 30, 1940, has been supplied by Dr. Oliver Greer:

2,534 different children received during year

832 children in hospital
1111 hospital admissions & re-admissions
1.34 average number of admissions per child admitted
28804 hospital days' care provided
25.93 days per admission
34.62 days per child admitted

2433 children seen in clinics
9379 clinic visits
3.85 average number of clinic visits per child

45 children in foster homes
81 admissions & re-admissions
1.80 average number of admissions per child
7550 foster-home days provided
93.2 days per admission
167.77 days per child admitted

132 children in rotary
168 admissions & re-admissions
1.27 average admissions per child
12985 convalescent-home care days provided
77.29 days per admissions
99.33 days per child admitted

As will be noted from Dr. Greer's report, the number of different children receiving care has risen to 2,534 as compared with a total of 1,658 for last year.

The report of cost of service rendered by the Division of Services for Crippled Children of the State Department of Public Welfare during the fiscal year, ending June 30, 1940, is given for your attention.

Total State Administrative Costs	$ 24,717.91
Total Costs of State Services	35,313.69

Total Treatment Costs 181,372.32
Number of children receiving care during year 2,534.
Cost per child based on number of children treated, July 1, 1939 to June 30, 1940.

	Cost	*Percent*
Treatment	$ 71.58	75.2
Services	13.94	14.6
Administrative	9.75	10.2
TOTAL	$ 95.27	100.

It was predicted in last year's report that as the number of children to whom services were rendered increased, the administrative cost would show a proportionate decline. This prediction has come true for this past year; the administrative cost has fallen to 10.2 per cent as compared with 11.4 per cent for last year.

As reported last year, Fort Wayne was chosen as a third hospital center. Your Committee is pleased to report that this center is now functioning in addition to those in Indianapolis and South Bend.

A meeting of the Liaison Committee with Dr. Greer was held on June 20, 1940, at which time the Indiana State Plan for the management of the Services for Crippled Children for the ensuing year was examined and the policies maintained in said plan were approved. In addition it was unanimously voted that no new appointments be made to the various medical centers unless said applicants "are qualified and are licentiates of the Board of Orthopedic Surgery." It was unanimously agreed that Dr. David Schwartz be given a position as orthopedist at Fort Wayne.

It was further recommended that efforts be persisted in to have the local county societies request post-graduate meetings with the subject of crippled children and clinics in relation to same as part of the program. To date very little cooperation on the part of the county societies has been received in regard to this matter. It is to be hoped that there will be several such clinics held in the ensuing year for they will not only be of benefit to the department of services to crippled children in locating indigent cases needing care but will also be of educational benefit to the physicians attending such clinics.

The field staff of the Division of Services for Crippled Children lent assistance in a poliomyelitis epidemic in Lake County last fall and this summer has rendered assistance in the northern area of the state where acute cases of poliomyelitis have been reported. This field staff consists of a nursing supervisor, four orthopedic nurses, and two physical therapists and is available to render this service at any time.

The Division to date has provided a limited number of pediatric consultation services in cases of acute poliomyelitis where the attending physician desired special consultation services. These consultants have been paid for rendering such services out of Federal funds at the rate of $10 per consultation when such consultation was rendered in the city in which the consultant resided, and at the rate of $15 per consultation when such consultation was rendered outside the environs of the city in which consultant resided.

Your Liaison Committee has continued during the past year to act in the capacity of an advisory group to the Director of the Division of Services for Crippled Children, and its recommendations have continued to be accepted in a most friendly manner.

We again wholeheartedly commend to the House of Delegates the efforts of Dr. Greer in the administration of the activities of this division, which are conducted in a most ethical manner with highly qualified personnel, and we again solicit your cooperation to assist him in making this program for the needy crippled children of Indiana one of the most outstanding in the country.

Respectfully submitted,

I. C. BARCLAY, M.D., *Chairman*
WAYNE R. GLOCK, M.D.
PAUL S. JOHNSON, M.D.
J. H. WEINSTEIN, M.D.
JOHN H. GREEN, M.D.
GEORGE A. COLLETT, M.D.
L. A. ENSIMINGER, M.D.
R. L. SENSENICH, M.D.
L. L. SHULER, M.D.

AUDITING COMMITTEE

House of Delegates,
Indiana State Medical Association

Gentlemen:

Your Committee met at the Indiana National Bank on August 23, 1940, at which time the securities held by the Association, both in the general fund and the medical defense fund, were examined and found to be in order as listed by the George S. Olive and Company, certified public accountants, in their annual report for the year ending December 31, 1939. (See report of the treasurer, page 545.) In addition to the securities listed in the accountant's report, $3,000 was invested in United States Savings bonds from the medical defense funds in March, 1940, and these bonds constitute an increase in the medical defense reserve fund.

None of the Association's holdings matured during the year.

Your Committee also examined the cash balances in The Indiana National Bank, The American National Bank, The Fletcher Trust Company, and The Bankers Trust Company, as shown by the check books, and all of these accounts were found to be in accord with the bank statements as of July 31, 1940. These accounts consist of the general headquarters office fund, the medical defense fund, THE JOURNAL fund, and the petty cash fund respectively.

Respectfully submitted,

O. B. NORMAN, M.D., *Chairman*
W. F. HUGHES, M.D.
E. B. RINKER, M.D.
M. B. CATLETT, M.D.

COMMITTEE ON THE CONTROL OF CANCER

House of Delegates,
Indiana State Medical Association

Gentlemen:

The work of the Cancer Control Committee, as appointed by the president of the Indiana State Medical Association, has been mostly delegated to the Executive Committee of the state organization of the Women's Field Army of the American Society for the Control of Cancer. This committee is composed of Drs. Thurman B. Rice, Charles W. Myers, E. E. Padgett, and Roy A. Geider and Chester A. Stayton, co-chairmen. One meeting of the Cancer Control Committee was attempted but only three members attended. The executive committee of the Women's Field Army held numerous meetings throughout the year with the officers of the Women's Field Army.

In March a special letter was sent to each district councillor and each county secretary by the State Society committee explaining in detail the organization and work of the Women's Field Army in each county and urging active support and leadership for the movement. We adhered to the principle that each meeting arranged by the WFA for the discussion of cancer must have the approval of the county medical society and if possible the speaker should be provided by that group.

The records show fairly good co-operation from a majority of the county societies. The WFA succeeded in getting workers in 62 counties and 48 of these reported more or less activity. Three large counties, Delaware, Vanderburgh and St. Joseph did not complete an organization of the WFA even though we had good support from the county medical organization.

The following additional counties did not complete a WFA organization in 1940: 1st District—Pike, Perry, Posey and Warrick. 2nd District—Martin, Sullivan. 3rd District—Crawford, Floyd, Lawrence, Scott, Washington. 4th District—Brown, Delaware, Jackson, Jennings, Jefferson, Ohio, Ripley, Switzerland. 5th District—Clay, Park, Vermillion. 6th District—Franklin, Henry, Union. 8th District—Jay. 9th District—Boone, Tipton, White. 10th District—Jasper, Newton. 11th District—Cass. 12th District—Adams, Noble, Wells, Whitley. 13th District—Fulton, Laporte, Marshall, Pulaski, Stark.

The WFA in its campaign for funds in 1940 collected $8,533.93, which is an increase of 64% above 1939. 30% of this was forwarded to the National Society for the Control of Cancer in New York City. The net balance remaining for use in organization and educational work in Indiana was $5,973.75. Of the above total collected Marion County contributed $3,123.88. Unusually good work was reported from Lake, Madison, Tippecanoe, Blackford, Hendricks and Johnson Counties.

Approximately 200,000 pieces of cancer literature were distributed throughout the state during the year preceding September 1940. The state office of the WFA purchased a set of wax models and these were displayed in 14 different counties including the Indiana State Fair at Indianapolis. These wax models attracted an unusually large number of people and approximately 10,000 pieces of literature were distributed at the state fair and 10,000 pieces during the displays in the other 13 counties.

There is a record of 40 talks on cancer made by physicians in co-operation with the WFA. Many other talks, of which we have no record, were made. The Marion County Medical Society was very co-operative and organized a speakers' bureau to take care of the requests for speakers, in Indianapolis. The American Society for the Control of Cancer has discontinued its regional representative in Chicago. This position has been filled by Dr. Frank L. Rector who has made several speaking tours throughout Indiana. Dr. Rector has been unusually successful in speaking to high school students and local captains of the WFA reported much interest shown among pupils and teachers. 6,500 pamphlets were distributed through the high school. The work of this office will hereafter be undertaken by the Executive Committee of the WFA.

The committee expresses appreciation for the co-operation given by the president, Dr. Karl R. Ruddell, the state headquarters staff, the bureau of publicity, the editor of THE JOURNAL, the Indiana state board of health, the executive committee of the WFA, the district councillors, county secretaries, other state society committees and Mrs. Isaac Born, State Commander of the WFA and her very able assistants.

The following recommendations are submitted:

1. The appointment of a cancer control committee in each county medical society to assume leadership and cooperate with the local organization of the Women's Field Army.

2. The establishment of diagnostic cancer clinics in some of the larger cities in Indiana where such service is not available. These clinics to be with consent and under the direction of the local county medical society officers and arranged in co-operation with the WFA.

3. The preachment of the slogan, "Early Cancer Is Curable," by the Medical Profession.

CHESTER A. STAYTON, M.D.
ROY A. GEIDER, M.D. } *Co-chairmen*
C. L. BOTKIN, M.D.
A. R. CHAMBERS, M.D.
O. R. SPIGLER, M.D.
GEORGE F. SMITH, M.D.
W. R. CLEVELAND, M.D.

COMMITTEE ON VENEREAL DISEASE

House of Delegates,

Indiana State Medical Association

Gentlemen:

The following policy was outlined and recommended:

The attention of the practicing physicians in the State of Indiana is called to Section 2 of House Bill 134, passed in March, 1939, and becoming effective on March 1, 1940: "That the above entitled act be further amended by adding thereto a supplemental section to read as follows: Section 14.1. No application for a marriage license shall be accepted by the clerk of the circuit court unless accompanied by or unless there shall have been filed with him a statement or statements signed by a duly licensed physician that each applicant has been given such examination including a standard serological test as may be necessary for the discovery of syphilis made on a day specified in the statement which shall be not more than the thirtieth day prior to that in which the license is applied for, and that in the opinion of the physician the person thereon named is not infected with syphilis or if so affected, is not in the stage of that disease whereby it is communicable at such time."

It is apparent that the task of determining whether or not an individual is infectious is left to the discretion of the examining physician. The Syphilis Control Committee has attempted to lay down certain rules which will form a basis for the determination of infectiousness among applicants. These rules have nothing to do with the question of cure. The object of the law is to prevent transmission of syphilis to the other partner in the union, or to the offspring of this union. Wasserman-fastness, resistant neurosyphilis, cardiovascular syphilis, etc., are considered only in the light of infectiousness.

TYPE OF CASES CONSIDERED

Early Syphilis (of less than five years duration)

Two types of cases are considered under this heading:

1. That type of case in which a positive serology has never been present, but in which a dark field examination has identified the presence of the disease.

2. The case in which a positive serology has been present from the time of the original diagnosis.

Serologic tests alone are not a satisfactory guide to infectiousness in a case known to have early syphilis and should not be accepted for certification. No person should be considered non-infectious who has not received a recognized, adequate amount of treatment. This treatment should consist of thirty (30) injections of the arsenicals and forty (40) injections of the heavier metals. An individual can be considered worthy of certification where treatment has been continuously given and the patient has been serologically negative on blood and spinal fluid for one year. If spinal fluid and blood are negative at the end of two years and have remained negative for a one-year period, where treatment has been taken irregularly, but the total amount conforms to the above standards, the patient may be considered worthy of certification. In cases of syphilis in which a positive serology has occurred, but in spite of the above amounts of treatment Wassermann-fastness still prevails, certification may be granted on sufficient evidence of the above amount of treatment, wherein a period of three years has elapsed after the original date of the infection.

The committee is of the opinion that both parties to a marriage contract should be informed of the fact that one member is not considered cured and that, therefore, both of them should report yearly for a period of five years for clinical and serologic tests. In addition to this, the wife should report immediately for serologic and clinical observation upon the occurrence of pregnancy.

Late Syphilis (more than 5 years duration)

The opportunity for infectiousness in cases of marriage involving late syphilis is considered less probable than in early syphilis. Here, again, the committee is of the opinion that both parties should be informed of the presence of the infection. If the woman becomes pregnant she should immediately report for serologic and clinical observation.

The committee believes that in preparation for marriage cases of late syphilis should receive twenty (20) injections of the arsenicals and sixty (60) of the heavier metals.

Congenital Syphilis

Wasserman fastness is recognized as notoriously common in cases of congenital syphilis. Where such evidence is presented that a doctor may be assured of the definite proof of the existence of congenital syphilis, the same rules should apply as to those cases of over five years' duration. In other words, twenty (20) injections of the arsenicals and sixty (60) of the heavier metals should be used in preparation for marriage. Here, again, the committee feels that the contracting parties should know of the presence of the disease in one or the other and that yearly physical examinations and blood tests should be advised. In addition, that all cases of pregnancies should report immediately for treatment to protect the offspring.

Respectfully submitted,

F. R. N. CARTER, M.D., *Chairman*
MINOR MILLER, M.D.
L. G. MONTGOMERY, M.D.
W. P. MORTON, M.D.
E. O. NAY, M.D.
B. W. RHAMY, M.D.
S. W. LITZENBERGER, M.D.

COMMITTEE ON INDUSTRIAL HEALTH

House of Delegates,

Indiana State Medical Association

Gentlemen:

In these times of national and international stress and with the possible ultimate involvement of our nation in war, our production facilities must be kept at peak form and in case of national emergency the loss of workers through illness, etc., would be of equal, if not greater import, than the loss of a soldier at the front. It is with this realization that your Committee submits the following program and suggestions, and emphasizes the imperative need for vigorous cooperation of each member of the state medical society.

The industrial hygiene program calls for the closest cooperation between the medical profession (industrial physicians or those doing any industrial work, especially), State Labor Department, industrial nurses and the manufacturers' association. To obtain this end the following program is outlined:

Industry.

1. Absenteeism in employees.
 a. Reason and cause.
 b. Causal relationship (if any) to raw materials or by-products.
2. Pre-employment examinations.
 a. X-ray in dusty trades.
 b. Routine blood tests, seeing that positive cases are not dismissed, but given adequate treatment.
3. Physicians report all cases of industrial poisoning or dermatitis, etc., to the State Bureau of Industrial Hygiene, to enable this bureau to assist in finding cause, if necessary.
4. Education.
 a. Physicians through articles in journals, etc., symposia or post-graduate courses, if the demand is signified.
 b. Course in industrial medicine and law in school curriculum.

This Committee would recommend that all employers, according to size, have either full-time physician or appoint one or two competent physicians to examine all employees and care for industrial injuries, these men to be responsible for the health of such employees relative to working conditions. Emphasis is made on the industrial physician not competing with the family physician, but limiting his extramural practice to only such cases as the workmen's compensation and occupational disease laws require of him.

If possible, have one or two physicians in the five members of the Industrial Board.

The Committee feels that the A. M. A. could be of greater assistance by distributing an Industrial Physicians Roster, and by the coordination and standardization of all State Industrial Hygiene programs wherever possible.

Respectfully submitted,

C. V. Rozelle, M.D., *Chairman*
W. F. Kelly, M.D.
J. W. Hilbert, M.D.
G. W. Batman, M.D.
T. W. Oberlin, M.D.
Lowell M. Green, M.D.
W. C. Wright, M.D.

COMMITTEE TO STUDY CULTISTS AND IRREGULAR PRACTITIONERS

House of Delegates,

Indiana State Medical Association

Gentlemen:

The activity of this Committee has been largely confined to sending detailed advice to the various county societies as to the proper steps to take in presenting evidence to the authorities, in cases of violation of the medical practice act.

Respectfully submitted,

Alfred Ellison, M.D., *Chairman*
A. J. Lauer, M.D.
C. L. Boyd, M.D.
M. R. Lohman, M.D.
W. A. Shuck, M.D.

COMMITTEE ON INDIANA INTER-PROFESSIONAL HEALTH COUNCIL

House of Delegates

Indiana State Medical Association

Gentlemen:

Your committee representing the State Medical Association on the Inter-Professional Health Council met with other groups represented in the Council during the month of March.

Previous efforts to safeguard the public through appropriate poison law legislation have too often been written from the narrow viewpoint of some one group. Failure of enactment usually followed when other affected groups, seeking modification, lacked the necessary time for study during the hurried 60 days' session of the Legislature.

The Inter-Professional Health Council, under the able leadership of Dean C. B. Jordon, sought to harmonize conflicting interests by calling representatives of all professional, retail, manufacturing, and farm groups around the table for discussion and elaboration of an equitable law. The State Board of Health was represented by Dr. Verne Harvey and several associates.

At a later meeting this committee decided that four distinct problems were involved and that they should be studied separately. These problems were listed as follows:

1. Barbiturates and sedatives.
2. Dangerous drugs, sulfanilimide, etc.
3. Poisons and agricultural chemicals.
4. Veterinary drug preparations.

Study groups for each of the four problems were appointed from among those directly interested and asked to report in September, a date too late to be included in this report. It is hoped to have this ready for the next session of the Legislature.

In an effort to strengthen solidarity among the Inter-Professional Health groups, a proposal has been advanced for the consideration of the groups. It is proposed that a joint time of meeting be selected at some time during the year when annual sessions could be held separately and a joint meeting on some evening when some figure of national prominence could speak on a subject of common interest.

Respectfully submitted,

F. S. CROCKETT, M.D., *Chairman*
H. G. MORGAN, M.D.
E. M. VAN BUSKIRK, MD.

ANTI-TUBERCULOSIS COMMITTEE

House of Delegates,
Indiana State Medical Association

Gentlemen:

The Tuberculosis Committee has been quite active the past year. Two meetings have been held and the number of county tuberculosis committees has been increased so that at the present time we have sixty-nine committees with a membership of 224.

Several county societies have had tuberculosis programs during the past year. However, the committee feels that every county society should have one meeting during the year devoted to a tuberculosis problem or allied subject.

At the last state committee meeting it was agreed that a list of subjects with speakers be sent to each county society and a request be made that at least one tuberculosis program be held during the year.

The committee has cooperated with the Indiana Tuberculosis Association and they are pleased to cooperate with us.

A committee of the state tuberculosis association has formulated the following information in regard to the tuberculin test:

1. The tuberculin test, as a screen test, is valuable in educating the public concerning tuberculosis. Permission from parents brings about their interrogation about the prevention and cure of this disease. A positive test, properly explained, further enhances their information without undue alarm. Indirectly, a contact case may be found, which is an active case of reinfection tuberculosis.

 It is suggested that high school students be selected for tuberculin testing in the following order according to the availability of funds:

 1. Juniors
 2. Seniors
 3. Sophomores
 4. Freshmen

2. The tuberculin test is effective in case-finding projects among special groups, such as preschool children, high school students, nurses, medical students, domestic help (especially colored), food handlers, young women in industry, athletes and the like. The positive reactor should be x-rayed.
3. The use of various doses of tuberculin has little or no value in the treatment of tuberculosis, but is extremely valuable as an adjunct in differential diagnosis in diseases of the lung when correlated with x-ray, laboratory and clinical findings.
4. The committee recommends the use of P.P.D. and O.T. for mass testing as being more economical. However, the private physician using the patch test will find it more economical and practicable and the results comparable to P.P.D. .001 mg.

 The following doses are recommended:

Under 3			
1st Test	0.01 mg. O.T. (1:10,000)	or	PPD 1st strength
2nd Test	0.1 mg. O.T. (1:1,000)	or	PPD 1/5 dose 2nd strength (0.005 mg.)
Ages 3 to 6			
1st Test	0.1 mg. O.T. (1:1,000)	or	PPD 1st strength
2nd Test	1.0 mg. O.T. (1:100)	or	PPD 1/5 dose 2nd strength (0.005 mg.)
Ages 6 to 18			
Single Test Dose	1.0 mg. O.T. (1:100)	or	PPD 1/5 dose 2nd strength (0.005 mg.)
Ages 18 to 50			
1st Test	0.1 mg. O.T. (1:1,000)	or	PPD 1st strength
2nd Test	1.0 mg. O.T. (1:100)	or	PPD 1/5 dose 2nd strength (0.005 mg.)
Ages 50 and over			
Single Test Dose	1.0 mg. O.T. (1:100)	or	PPD 1/5 dose 2nd strength (0.005 mg.)

 Pre-school children should receive two doses of tuberculin—one weak and one strong. Between the ages of 6 and 18 one dose may be used safely, if active tuberculosis is not suspected. Between ages of 18 and 50 two doses should be used. Over 50 one dose can be used.

 (For clarification, the first test strength of P.P.D. contains 0.00002 mg., which corresponds to, but is not efficient as 0.1 cc. of O.T. in dilutions of 1:1,000 (0.1 mg. of O.T.). The second dose of P.P.D. (0.005 mg.) is 250 times the first test strength dose of P.P.D. An intermediate dose of 0.001 mg. of P.P.D., which is equal to 50 times the first dose, is sometimes used.)

 Between the ages of six and eighteen, one dose of tuberculin can be used as 1.0 mg. of O.T. or P.P.D. 0.001 mg. More three and four-plus reactions will be found with 1.0 mg. of O.T. than with P.P.D. 0.001 mg., whereas there is very little difference in their case-finding efficiency.

 Between the ages of 18 and 50, which includes the majority of school teachers, two doses of tuberculin should be administered, for example,

0.1 mg. of O.T., or the first strength of P.P.D., and if negative followed by the second test of 1.0 mg. of O.T., or P.P.D. 0.001 mg.

From 50 on a single test dose can be used of O.T. 1.0 mg., or P.P.D. 0.001 mg. as a screen test, without occurrence of too many four-plus reactions. P.P.D. 0.005 mg. should never be used as a single test dose, because with it too many four-plus reactions occur.

To make P.P.D. 0.001 mg. (⅕ second test strength dose) add 4 c.c. of normal saline to P.P.D. second strength dose (0.005 mg.). To make up P.P.D. second strength, use one tablet per 1 c.c. of diluting fluid which comes in package.

Note: Smallest dose that can be made up at one time is one tablet. You cannot divide tablet and get good results. One-fifth dose (0.001 mg.) made up as above is sufficient for 50 tests.

Most of the members of the tuberculosis association committee are also members of the medical association tuberculosis committee and we recommend these facts to be used by the county society tuberculosis committees.

The tuberculosis work in Indiana has made very good progress in the last twenty years but much more has to be done before tuberculosis will be controlled. In 1910 there were 50 beds for the treatment of tuberculosis, with a death rate of 174.4 per 100,000. In 1920 there were 422 beds and the death rate was 110 per 100,000. In 1930 the bed capacity was 1156 with a death rate of 65.9 per 100,000. In 1940 the bed capacity is 1907. There were 1412 deaths in 1939, a death rate of 40 per 100,000. This compares favorably with Illinois with 45.2 deaths per 100,000; Ohio 43.1 per 100,000; Kentucky with 67 deaths per 100,000, and Michigan with 38.3 deaths per 100,000.

The following hospitals are available in Indiana:

Name	*Number of Beds*	
Sunnyside Sanatorium	273 adults	
Healthwin Hospital	160 adults; 50 children	210
Boehne Tuberculosis	150 adults	
State Sanatorium (Rockville)	275 adults	
Irene Byron Sanatorium	197 adults; 30 children	227
James O. Parramore Hospital	280 adults; 20 children	300
Ella B. Kehrer Hospital	50 adults; 15 children	65
Wm. Ross Sanatorium	37 adults; 4 children	41
Smith-Esteb Memorial Hospital	50 adults	
Hillcrest Tuberculosis Hospital	66 adults	
Silvercrest State Tuberculosis Hospital	150	
Flower Mission	100	
	1,907	

We urgently recommend that all conscripts be tuberculin tested and x-rayed. This will screen out clinical cases of tuberculosis which are bound to break down with the army regime.

The committee feels that its work should be continued and we hope that every county society will eventually have a tuberculosis committee.

Respectfully submitted,
J. H. Stygall, M.D., *Chairman,*
J. V. Pace, M.D.,
R. B. Sanderson, M.D.,
P. D. Crimm, M.D.,
M. H. Draper, M.D.,
R. S. Henry, M.D.

COMMITTEE ON CONSERVATION OF VISION

House of Delegates,
Indiana State Medical Association

Gentlemen:

The Committee on Conservation of Vision has taken the following actions this year:

1. Completed the draft of the amendment to the law to make compulsory the instillation of 1 per cent silver nitrate solution in the eyes of the new born and provided a manner of securing freshly prepared solution of same in wax ampules. This to be introduced at the next session of the State Legislature.

2. Attempted to secure a survey of trachoma cases in the entire state through Committee on Conservation of Vision of the county societies.

3. Held a joint meeting with the Committee on Conservation of Vision of the Indianapolis Medical Society and the Indiana Academy of Ophthalmology and Otolaryngology.

Held a meeting with the District Governor of Lions Club and arranged for a speaker from the Indiana State Medical Association to address their state convention at Richmond, Indiana, in June. Dr. C. W. Rutherford did this and his speech was well received.

4. Arranged for an educational exhibit at the Indiana State Fair this year; this exhibit to be the same as last year, i.e., some blind people operating a loom and caning chairs to attract the crowd's attention. The walls surrounding them are to be posted with pictures and diagrams to carry the message of conserving vision.

5. Arranging for a meeting of the members of the County Society Committees on Conservation of Vision at the annual meeting at French Lick. A round table discussion is to be held there.

6. Our efforts to call attention to the matters of vision and eye health have inspired several instances over the state in which the physicians have run counter to the optometrists. This shows we are engendering some heat and making some progress. The efforts to educate are slow to show results, but in time they do accomplish far-reaching effects.

Respectfully submitted,
E. E. Holland, M.D., *Chairman*
J. V. Cassady, M.D.
O. T. Allen, M.D.
E. L. Van Buskirk, M.D.
R. J. Masters, M.D.

PNEUMONIA COMMITTEE

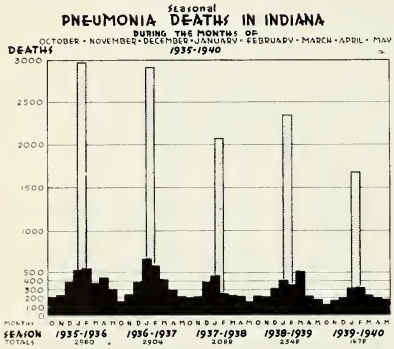
House of Delegates,

Indiana State Medical Association

Gentlemen:

During the past year the pneumonia committee has been active in cooperation with the Board of Health in perfecting rapid facilities for typing and serum distribution.

Many talks have been arranged for medical societies and lay organizations. Articles have been prepared for newspaper releases. Further pneumonia publicity will be arranged for at the next meeting of the committee.



The above chart seems to give evidence that the effort of the Indiana State Medical Association and the State Board of Health in supplying and properly using modern pneumonia therapy is resulting in a definite decrease in the mortality rate from this disease.

Respectfully submitted,

C. J. CLARK, M.D., *Chairman*
H. S. RAMSEY, M.D.
A. S. GIORDANO, M.D.
P. L. STIER, M.D.
R. G. HARKNESS, M.D.
R. H. BAYLEY, M.D.
H. C. WADSWORTH, M.D.

DIRECTOR OF RESEARCH ON SICKNESS INSURANCE

House of Delegates,

Indiana State Medical Association

Gentlemen:

Passage of a year and new events of real importance have, at least for the indefinite future, lessened the threat of socialized medicine. The quick subsidence of propaganda for it demonstrates the artificiality of the demand.

The mounting war concern which somewhat approaches the hysteria stage demonstrates how quickly and profoundly the public mind can demand and secure definite action. It makes clear the need for the medical profession constantly to keep intact and invulnerable its defenses against a recrudescence of the movement, which conceivably might do serious hurt, not only to the profession but inherently, as well, to the very public demanding changes, without seeing clearly the results.

The year's passage has shown the weaknesses of many proposed schemes and has also served to suggest innovations useful to us in our declared intentions to provide every needed and feasible change in medical practice. Such information as is presently procurable from abroad indicates a chaotic medical situation, possibly not escapable in war, in which the medical needs of the civilian population are practically abandoned. The registration and selective plan for handling our own possible war needs will maintain an uninterrupted if diminished service, but will also prove our claimed competency to administer medical needs as they arise and give us another powerful resisting argument against proposals of social reformers.

A continuous survey of actual operation of plans and methods for furnishing medical service to low income groups indicate that the private companies selling insurance, and corporations conducting group plans which they subsidize and limit, are greatly expanding the number of policy-holders, with general satisfaction to the insured, though no clear statements of the financial results are yet available. Correspondence with actuaries bring only comments that sufficient experience is not yet at hand to determine real costs. It is noted that possession of a policy increases the urge for hospitalization, even if apparently unnecessary. The so-called non-profit organizations seem to be having increasing difficulties because of inadequate rates and over enthusiastic promises. There is increasing insistence by State Insurance Commissioners that all plans, whether altruistic or frankly commercial, be sound. Such insistence on performance of contract, unfortunately, does not extend to the professional reimbursement, and as might have been expected, the medical men take the necessary losses. The question must be settled whether the non-profit and mutual plans must emulate the commercial companies in using sound actuarial figures instead of enthusiasm and also have sufficient reserves or ask for public subsidies to meet deficits. The experience with the old-time insurance lodges may be worth considering.

Reported experiences from widely separated areas and plans indicating considerable dissatisfaction, bring to us the warning of need for much care and considerably more information before officially adopting or approving any plans or of asking modification of our insurance laws. A survey in one area found that in general the public

was indifferent and uninterested. But the ones notably interested were those who ought not be eligible because they were amply able to meet needs.

A disquieting phase of the plans most soundly administered is the closed panel. They do carry out their promises and probably, at present, by generous provision for overhead expense, pay their designated physicians better, but our cherished principle of free choice is abandoned and eventually even these better paid physicians will find the pay not so satisfactory and the regulations severe.

The proposed increased hospital building scheme seems to be halted. As was so clearly stated by one of our own A. M. A. delegates, the end of such plans is centralized Federal control through subsidy of matching funds.

The National Physicians' Committee has been carrying on a sound approach to the public but is handicapped by insufficient funds. Here in Indiana, we have a considerable mechanism for defense action against socialized medicine propaganda. While its strength has not openly been tried, the slowness of growth of medical care programs indicate its value, which is capable of expansion in need.

Time and better economic conditions and more important issues join to give us opportunity to see the defects in proposed schemes and eventually to provide workable methods of supplying demanded care with orderly and sane provisions for needed care.

Respectfully submitted,
Walter U. Kennedy, M.D.

M-DAY COMMITTEE

House of Delegates,
Indiana State Medical Association

Gentlemen:

As a matter of fact the special military medicine issue of The Journal which appeared in September might well stand as the annual report of the M-Day Committee of the Indiana State Medical Association. This Journal, together with the numerous bulletins and requests which have been sent from time to time to the councilors and to the officers of the various local medical societies pretty well tell the story of what has happened up to date. As to what will happen in the future your Committee can only conjecture, but in order that the profession of Indiana may be prepared to meet any national emergency if and when it comes, we make the following recommendations:

(1) Each county medical society should appoint an M-Day Committee. When this report was written committees had been appointed in 33 counties.

(2) Each physician who has not yet filled out the American Medical Association questionnaire on military fitness and also the questionnaire for the members of the Indiana State Medical Association which appeared in the July issue of The Journal is requested to return these questionnaires at his earliest convenience.

In closing, your Committee wishes to thank the councilors, county medical society officers, and members of the local M-Day Committees which have already been appointed, for their whole-hearted help and cooperation.

Respectfully submitted,
C. R. Bird, M.D., *Chairman*
W. C. Von Kessler, M.D.
H. J. Norton, M.D.
M. L. Curtner, M.D.
A. G. Chittick, M.D.
Major Leslie T. Wheat,
United States Army, Advisory.

COMMITTEE ON PHYSICAL THERAPY

House of Delegates,
Indiana State Medical Association

Gentlemen:

The principal objective of our committee was announced at the beginning of the year as follows: "It will become our duty to foster an educational program throughout the year and to try to acquaint as many men as possible with the legitimate practice of physical therapy." To this end several county societies arranged for papers covering this subject, and we have a noted speaker appearing on the state program.

A hospital survey was made by one of our committee and is of sufficient import to be given special attention in the Journal.

Since the Indiana University Medical School is one of the few in the country giving adequate under-graduate instruction in physical medicine, we recommend the inclusion of this field in the annual post-graduate courses. We would further recommend the attention of the Medical School authorities toward the establishment of a school for technicians in connection with the University Hospitals. We would finally recommend the continuation of a committee on physical therapy as one of the standing committees of our state organization.

We sincerely express our appreciation to Tom Hendricks and others throughout the state who have helped with our problems.

Respectfully submitted,
E. L. Libbert, M.D., *Chairman*
H. W. Smelser, M.D.
E. N. Kime, M.D.
B. L. Harrison, M.D.
N. H. Prentiss, M.D.

NO REPORTS RECEIVED FROM LIAISON COMMITTEE WITH INDIANA STATE DEPARTMENT OF PUBLIC WELFARE AND MEDICAL RELIEF COMMITTEE

WOMAN'S AUXILIARY

The State Press and Publicity Committee is presenting the annual reports of all county auxiliaries as its final article of this year.

We wish to thank all members of the Woman's Auxiliary for their cooperation and wish for them success in the coming year.

MRS. C. C. TAYLOR, *Chairman*
MRS. E. B. LAMB
MRS. R. D. HOWELL

ANNUAL REPORTS FROM COUNTY AUXILIARIES

ADAMS COUNTY

The Woman's Auxiliary to the Adams County Medical Society was organized on February 9, 1940, with Mrs. W. E. Smith, of Decatur, Indiana, as President.

ALLEN COUNTY

The Woman's Auxiliary to the Allen County Medical Society was organized on April 27, 1939, followed by an organization tea on June 15, 1939, at which forty women became charter members of the auxiliary.

The program for 1939-40 was planned with the following aims: legislative, philanthropic, educational-public relations, and social. A news bulletin was issued by the program committee, the first issue containing the list of officers, committee chairmen, program for the year, and notes on the purpose and privilege of membership in the organization.

The first meeting of the year 1939-40 consisted of a picnic supper at the Irene Byron Tuberculosis Sanitarium on September 26th, at which a play, "Crusade," written, directed and narrated by Mrs. Alan Chambers, was given. This play was a short dramatic history of some of the highlights of the fight against tuberculosis. In October, 1939, the Allen County Auxiliary was hostess to the Eleventh State Auxiliary convention, giving a special dinner for women guests on the opening day, and being hostess to the State Auxiliary breakfast. On November 21st a meeting was held at the Methodist Hospital, at which Mr. Franklin, superintendent of the hospital, gave a short talk, and Mrs. Archie L. Keene reviewed the book "The Thibaults" by Martin duGard. On January 16th a meeting was held at St. Joseph Hospital with an address on "Recent Important Medical Legislation" by Dr. Jessie C. Calvin, also an address by Dr. Norman Beatty. On April 2nd a dessert-bridge was given at the Lutheran Hospital, and on May 21st a tea was held at Fairfield Manor where the program was given by Mrs. Werner W. Duemling on the "History of Medicine in Allen County." Election of officers was held for the coming year, and the organization disbanded for the summer with 98 members at that time.

An evening meeting was also held at the Chamber of Commerce on April 18th to which the public was invited. Mrs. Edgar Mendenhall and her committee publicized the meeting by issuing tickets admitting two persons. The subjects presented and discussed were Political Medicine; Pre-Natal Examination and the Marital Law.

The new president for the year 1940-41 is Mrs. E. A. King, Fort Wayne, Indiana.

CARROLL COUNTY

The Woman's Auxiliary to the Carroll County Medical Society was organized on December 12, 1939, with a charter membership of eight. The officers elected for 1940 are Mrs. Charles Crampton, Delphi, president; Mrs. Charles Wise, Camden, vice-president; Mrs. H. Y. Mullin, Rockfield, secretary; and Mrs. E. Brubaker, Flora, treasurer.

This auxiliary holds its meetings at the same time that the county medical society holds meetings, once a month. This consists of an evening dinner, with the separate meetings following. Plans are being made for a constructive program for the coming winter, and to keep well informed on affairs of interest to doctors' wives.

CASS COUNTY

The Woman's Auxiliary to the Cass County Medical Society was organized at Logansport, on February 16, 1940, with Mrs. Charles Viney of Logansport at president. There were thirty-one members at the end of the year 1939-40. There have been three meetings since the organization, and at each meeting one of the Cass County doctors addressed the group on the subject of legislation and what they, as wives, could do to help. The last meeting was held in Royal Center on May 17th.

DEKALB COUNTY

The Woman's Auxiliary to the DeKalb County Medical Society was organized on February 29, 1940, with Mrs. John Showalter, Waterloo, as president. This Auxiliary is one of a group of four with Noble County, Steuben County, and LaGrange County, which comprise the Northeastern Indiana Academy of Medicine. The group of four county auxiliaries plans to have their meetings at the same time and place as those of the Northeastern Academy. They have a composite list of officers, but each county auxiliary also has its own organization. Their first meeting was to be held September 26th in Kendallville. They plan to have dinner meetings, followed by a business and social hour. The program for the year has not been definitely decided upon, but they expect to have five meetings during the year.

DELAWARE-BLACKFORD COUNTY

The Woman's Auxiliary to the Delaware-Blackford County Medical Society holds its meetings every third Tuesday afternoon from September to

June. In June a joint meeting is held with the physicians at the medical society's annual picnic. Mrs. T. R. Hayes, Muncie, is president for the year 1940-41. The meetings are held in the sewing room at the Nurses' Home, Maria Bingham Hall, and the members make sponges and sew for the hospital during the meetings.

Auxiliary projects are: *Hygeia* subscriptions, of which four new subscriptions were obtained this past year; working for Visiting Nurses Association and Tuberculosis Association, furnishing books or magazines of medical nature for the medical library of the hospital, giving financial aid to the Community Fund and Red Cross, memorials honoring deceased members to the Visiting Nurse Association, aid in the cancer and diphtheria campaigns, contributions of food to the hospital during Delicacy Week, sponsoring health meetings, and contribution of prize money for health essays in the schools. They also have a committee which remembers all members who are ill or have deaths in their families.

This year they have also tried to acquaint themselves with information concerning state medicine, and to determine some course of action concerning it. This has been done through short discussions of topics taken from the medical journals by various members.

ELKHART COUNTY

The Woman's Auxiliary to the Elkhart County Medical Society was organized on May 24, 1940, with Mrs. L. A. Elliott, Elkhart, as president. Mrs. Richard B. Stout of Elkhart was appointed chairman of the program committee. The first meeting of the 1940-41 season is set for the first Thursday of October, and they are looking forward to a winter of interesting and constructive work. This meeting is to be a dinner meeting on October 3rd at the Y. W. C. A. and a program for the coming year will be decided upon at that time.

FLOYD COUNTY

The Woman's Auxiliary to the Floyd County Medical Society was organized in 1936, and now has a membership of 32. Mrs. William H. Garner, New Albany, is president for 1940-41.

A combined luncheon and business meeting was held each month during 1939-40, followed by sewing at St. Edward's Hospital. The Auxiliary members also entertained their husbands at an annual anniversary dinner in January and at a picnic in June. A special meeting this year was the Public Relations Tea on April 11th. Representatives from all city and county clubs were invited, 175 women and some 15 or 20 men being present. Dr. E. L. Henderson of Louisville was guest speaker.

This Auxiliary places five one-year subscriptions to *Hygeia* in junior and senior high schools, parochial schools and in colored high schools. Members served as hostesses at a Nurses' Tea, and on National Hospital Day at the local hospital. They made and filled a Soldier's Bag for the Red Cross at Christmas time. Donations have been made to the Tuberculosis Sanitorium and a ten dollar tuberculosis bond was purchased this year. They made a city and county club survey as requested by the State Auxiliary. The Wagner Bill, A.M.A.'s 8-point platform and suggested topics and literature have been read and discussed at meetings. A health exhibit with free samples is being placed in the public schools. The Auxiliary assisted in an immunization program carried out in the county and city by the State Board of Health and doctors from The Floyd County Medical Society.

GRANT COUNTY

The Woman's Auxiliary to the Grant County Medical Society was organized on February 1, 1940, with Mrs. George Daniels, Marion, as president.

HOWARD COUNTY

The Woman's Auxiliary to the Howard County Medical Society was organized February 22, 1940, with Mrs. W. E. Tinney and Mrs. Fred B. Wishard as guests. Mrs. F. S. Cuthbert, Kokomo, was elected president, and the Auxiliary has a membership of 18.

There were two meetings held following the organization meeting. At the April meeting, Mrs. W. E. Tinney gave an informal talk, and Dr. Norman Beatty was presented as guest speaker at the meeting held in May. Plans are going forward for an opening meeting for the 1940-41 season in September, and it is expected that the coming year will be a very interesting one.

LAGRANGE COUNTY

The Woman's Auxiliary to the LaGrange County Medical Society was organized on February 29, 1940, with Mrs. Harry Irwin, LaGrange, as president. This Auxiliary is one of a group of four, the others being Noble County, Steuben County, and DeKalb County, which comprise the Northeastern Indiana Academy of Medicine. The group of four county auxiliaries plans to have their meetings at the same time and place as those of the Northeastern Academy. They have a composite list of officers, but each county auxiliary also has its own organization. Their first meeting will be the last Thursday in September in Kendallville. They plan to have dinner meetings, followed by a business and social hour. The program for the year has not been definitely decided upon, but they expect to have five meetings during the year.

LAKE COUNTY

The Woman's Auxiliary to the Lake County Medical Society was organized on February 27, 1940, with Mrs. E. M. Shanklin, Hammond, as president. Her address at their first meeting was printed in its entirety in the May Bulletin. She said that the organization of the Lake County Auxiliary was undertaken at the definite request

of the County Medical Society, and they are organized for service and not for social intercourse. They expect to give the Lake County Medical Society valuable assistance in their Public Relations program. Their second meeting was held April 11, 1940, at the Nurses' Lecture Hall, St. Margaret's Hospital, Hammond. Mr. Thomas A. Hendricks, executive secretary of the Indiana Medical Association, was guest speaker of the evening. The Auxiliary Board was elected, and physicians were appointed as members of the Advisory Board to the Auxiliary. This Auxiliary is off to a fine start, and much is expected of it in the coming year.

MADISON COUNTY

The Woman's Auxiliary to the Madison County Medical Society was organized in 1927, and has a present membership of 43. Mrs. C. V. Rozelle was president for 1939-40, and Mrs. J. W. King is president for 1940-41. Meetings of the Auxiliary are held in the parlors of the Nurses' Home the first Monday of each month. During the past year the Auxiliary sponsored a book review by Mary Margaret Harrington, a travel talk by Wilfred Byrkett, and a very informative speech on "Cancer Control" by Dr. C. V. Rozelle. A Public Relations tea was held on Hospital Day, to which women of the city were invited. The Auxiliary organized the Victoria Guild, named in honor of Sister Victoria, under whose guidance the first hospital in Anderson was built. Membership in the Guild is open to any woman interested in humanitarian work, and there is an enrollment of 400 members. The Auxiliary makes contributions to the Red Cross, the Ella B. Kehrer Tuberculosis Hospital, the Visiting Nurse Shower, and other welfare works.

MARION COUNTY

The Woman's Auxiliary to the Marion County Medical Society wishes to report a very pleasant year of activity, with a gain in membership of 33, bringing to 165 the total. The four meetings held during the year have been mainly to promote friendship and sociability among the families of the doctors. Mrs. H. A. VanOsdal was the 1939-40 president, and Mrs. Fred Gifford will officiate for 1940-41.

The state president, Mrs. William Tinney, one of the members of the Marion County Auxiliary, was speaker and honor guest at the October meeting, held in the Auditorium of the Nurses' Home at St. Vincent's Hospital. Following her talk, a delightful musical program was given, new members introduced, and tea served.

The annual family party held in November was a very gay, informal Barn Dance and Fall Frolic, which was well attended. At the January meeting, held in the Nurses' Home of the Methodist Hospital, the work of the legislative committee in cooperation with the state legislative committee was discussed. An interesting talk, "At Home With the Nurse," was given by a guest speaker, and songs were given by the Girls' Glee Club of Shortridge High School.

The outstanding meeting of the year was the Public Relations Tea held March 4th in Hurty Hall of the New State Board of Health Building. Invitations were sent to all state officers, presidents of county auxiliaries, and presidents of civic and literary clubs of the city. It was gratifying to have a large representation present expressing their interest in public health. Dr. Verne K. Harvey spoke of the work of the various departments of the board, located in the new building, and also explained the new state marriage law. Dr. Herman Morgan, secretary of the Indianapolis Board of Health, spoke on "Modern Trends of Medicine and Public Health." Following tea, the women had the privilege of inspecting the new building. The final meeting of the year was held May third in the L. S. Ayres auditorium, at which committee reports were heard and officers elected for the coming year. At the close of the business meeting a delightful musical program was given, followed by an informal style show and tea.

Many of the members are active in civic affairs of a health nature assisting in the infantile paralysis, tuberculosis, and cancer control work. The annual health conference sponsored by the Parent-Teacher Association was founded by our state president, Mrs. William Tinney, and has been carried on by one of our members serving as chairman for the past four years. The Auxiliary contributed $10.00 to the state fund for cancer control. In supporting the *Hygeia* campaign, it was voted by the Auxiliary to use money earned from commissions on subscriptions for gift subscriptions to worthy institutions. We were happy to be able to donate subscriptions to the American Settlement, the Y. W. C. A., Public School No. 2, and the Mayer Chapel Community Center.

The president of the Auxiliary and four other members, together with the state president, attended a dinner meeting of the county secretaries held in the Columbia Club, when Senator James E. Murray spoke on the Wagner Health Bill. We appreciated the recognition given the Auxiliary, also the opportunity to inform ourselves further on this subject.

MARSHALL COUNTY

The Woman's Auxiliary to the Marshall County Medical Society was organized February 7, 1940, with Mrs. C. R. Graham, of Bourbon, as president. There are 13 members at present. They have luncheon meetings at the same time that the county medical society meets.

The first meeting was taken up with appointment of committees and discussion of their duties. A talk was given by the county health nurse. At the second meeting the Constitution and By-Laws was adopted, and a talk was given by a medical missionary from Africa.

The last meeting in May was a dinner party in Bourbon, where a talk was given by Mrs. Patzer, who has charge of the county May Day child health program.

MORGAN COUNTY

The Woman's Auxiliary to the Morgan County Medical Society was organized on December 13, 1939, after a joint dinner meeting with members of the medical society at the Martinsville Country Club. Mrs. William E. Tinney, state president, and Mrs. Fred Wishard, organization chairman, were present. Mrs. Patrick Murphy, of Morgantown, was elected president.

NOBLE COUNTY

The Woman's Auxiliary to the Noble County Medical Society was organized February 29, 1940, with Mrs. C. E. Munk, Kendallville, as president. This Auxiliary has a membership at present of seven. This Auxiliary is one of a group of four, the others being Steuben County, LaGrange County and DeKalb County, which comprise the Northeastern Indiana Academy of Medicine. The group of four county auxiliaries plans to have their meetings at the same time and place as those of the Northeastern Academy. They have a composite list of officers, but each county auxiliary also has its own organization. Their first meeting will be the last Thursday in September in Kendallville. They plan to have dinner meetings, followed by a business and social hour. The program for the year has not been definitely decided upon, but they expect to have five meetings during the year.

ORANGE COUNTY

The Woman's Auxiliary to the Orange County Medical Society was founded May 10, 1933, at French Lick. The membership at present is 12, in five different towns, and Mrs. George Dillinger, French Lick, is president. The group holds quarterly meetings at the time of the medical society meetings, and are usually preceded by a grand get-together over a "pitch-in" supper. At several banquet meetings the members of the Auxiliary have enjoyed speakers on medical subjects, and at others have joined with the doctors in round table discussions of the problems confronting the medical profession. Members have helped the doctors with health clinics, immunization work, health meetings and have worked for *Hygeia* subscriptions. The members of the Auxiliary are busy making plans for the State Medical Association meeting in October, and they wish to extend to every doctor's wife a most cordial invitation to come to French Lick at that time.

PORTER COUNTY

The Woman's Auxiliary to the Porter County Medical Society was organized on May 8, 1940, with Mrs. C. R. Douglas, of Valparaiso, as president. There are 13 charter members.

Mrs. William Tinney, state president, addressed the first meeting on May 8th, giving the aims of the auxiliary, and the organization plan. A meeting was held on May 28th in the Porter Memorial Hospital Guild room, when the constitution was adopted. Miss Hiatt, superintendent of the Porter Memorial Hospital, addressed the group, giving different aspects of Woman's Auxiliaries in other cities.

The dinner meeting held on June 25th climaxed the season. Plans for the coming year were discussed, it being suggested that a Public Relations tea be given, showing slides and movies provided by the A. M. A. to lay guests. Subjects to be stressed during the coming year are socialized medicine, the Wagner Act, and how public health can be safeguarded. It was suggested that the Auxiliary contact Rotary, Lions, Kiwanis and P. T. A. organizations to cooperate with future plans in helping put the above subjects before the public.

ST. JOSEPH COUNTY

The Woman's Auxiliary to the St. Joseph County Medical Society was founded in June, 1936, and now has a membership of 60. Mrs. P. C. Traver, South Bend, is president for the coming year. The first meeting of the year was a reception at which a report was given by the delegate to the State Convention. Following meetings included a luncheon sponsored for the Cancer Control with Mrs. Isaac Born of Indianapolis as guest speaker; a program with Mrs. Merle Whitlock of Mishawaka, discussing public relations; a luncheon held at the Oliver Hotel, with Mrs. W. E. Tinney as guest speaker on "What Part the Auxiliary Can Play Toward Abolishment of Plans for State Medicine Program"; a Lenten program in the form of a guest tea at the St. Mary's College, Notre Dame, with Sister Madelena as speaker on "Spring in the Four Continents." The last meeting was a May breakfast at the South Bend Country Club with Dr. R. L. Sensenich, past president of the Indiana State Medical Association, as guest speaker on the Wagner Bill.

This Auxiliary sponsors four health programs. The department of public health will loan films to be shown in public and parochial schools, and physicians will accompany the showing with talks. The Auxiliary has placed *Hygeia* in each public school in South Bend, including Catholic schools, and is planning to include the county schools.

They have received honorable mention for *Hygeia* subscriptions, being the only Auxiliary in the state to go over the top in their subscription campaign.

STEUBEN COUNTY

The Woman's Auxiliary to the Steuben County Medical Society was organized February 29, 1940, with Mrs. S. S. Frazier, Angola, as president. This Auxiliary is one of a group of four, others being Noble County, DeKalb County, and LaGrange

County, which comprise the Northeastern Indiana Academy of Medicine. Steuben County has remained inactive as a county organization as only a few members attend the Auxiliary, but some of their members are active in the Northeastern Academy organization.

TIPPECANOE COUNTY

The Woman's Auxiliary to the Tippecanoe Medical Society was organized February 13, 1940, with Mrs. William Tinney as guest speaker. The membership is 44, and the president is Mrs. R. A. Flack of Lafayette.

Mr. Thomas Hendricks, executive secretary of the Indiana State Medical Association, was guest speaker at the March meeting, speaking on "State Medicine." At the April meeting, members heard "Susie Slagle's," by Augusta Tucker, reviewed. At the final meeting in May Dr. Floyd Romberger, of Lafayette, spoke on state medicine.

It was decided that the Auxiliary would meet the second Tuesday of every month from September until April next year, and that there would be an educational program every second meeting and a discussion among the members at the other meetings.

VANDERBURGH COUNTY

The Woman's Auxiliary to the Vanderburgh County Medical Society has a membership of 85 and Mrs. Charles P. Schneider, of Evansville, is president for the coming year. This Auxiliary meets on the fourth Tuesday of alternate months, starting in September.

The first meeting was a luncheon at the Westhaven Gun Club on October 24, 1939, followed by a report of the State Convention. On November 28, 1939, they were guests of Boehne Hospital at a luncheon, followed by a lecture on "Diagnosis and Treatment of Tuberculosis," illustrated with slides, given by Dr. Paul Crimm, superintendent of Boehne Hospital for Tuberculosis. A luncheon meeting was held at the Vendome Hotel on January 23, 1940, at which donations of $1.00 were received from every member for the purchase of teen-age books for Boehne Hospital. In March a lovely tea was given at the home of Mrs. Charles Willis, Sr., at which Mrs. William E. Tinney, state president, spoke informally on the Cancer Control drive. Mrs. Moore, of Indianapolis, was also present and gave a short talk on the State Cancer Drive. Miss Gertrude Leich, librarian, reviewed "Dr. Hudson's Secret Journal," by Lloyd C. Douglas. The year ended with an outdoor picnic in May, at which new officers for the coming year were elected.

VIGO COUNTY

The Woman's Auxiliary to the Vigo County Medical Society has a membership of 82, and the president for the year 1940-41 is Mrs. Floyd Riggs of Terre Haute. This Auxiliary is outstanding for its support of the occupational therapy work in the two Terre Haute hospitals. This project, which is in its second year, consists of payment of a teacher, Miss Ruth Watts, who teachers occupational therapy at both St. Anthony's and Union hospitals twice a week for two hours each time. The materials are also financed by the Auxiliary. In April, 1940, she taught 105 patients, adults as well as children. An exhibit was prepared and taken to the A. M. A. meeting in New York.

The first meeting was held at the home of Mrs. J. R. Yung on October 16th, during which the hostess gave a most interesting talk on her recent trip to Mexico. In November the Terre Haute House was the scene of the Philanthropic Bridge party, from which $111.15 was cleared for use in the Occupational Therapy work. Mrs. Yung presented the Auxiliary with one of her beautiful paintings for use as grand prize. On January 9th a formal dinner was given at the Terre Haute House, after which Miss Charlotte Lee read S. W. Behrman's play, "No Time for Comedy." On March 4th a business meeting was held at St. Anthony's hospital, at which Mrs. Thomas Moorhead read the play "Excursion." The final meeting of the year was a picnic luncheon at the country home of Mrs. Utterback, at which election of officers was held. Mrs. W. E. Tinney was guest speaker, and Mrs. W. F. Hughes of Indianapolis was also a guest. Reports showed that an additional $105.00 was raised by the Ways and Means Committee during the year for the Occupational Therapy work.

WABASH COUNTY

The Woman's Auxiliary to the Wabash County Medical Society was founded in 1937, and now has a membership of 20, with Mrs. G. W. Seward as president for 1940. The meetings are held on the same night as the county medical society meeting, the first Wednesday of each month.

The October meeting was spent in discussing the Topic of the Month, "Nervous and Mental Diseases." In December, Mrs. J. G. Kidd, of Roann, with Mrs. J. L. Walker, of LaFontaine, entertained at a dinner at the Woman's Club in Wabash. Officers were elected for the year, and the guest speaker, Mrs. Alvah Watson, of Wabash, gave an excellent lecture on child psychology. The January meeting was completely spent in legislative discussion. Letters from Mrs. W. E. Tinney concerning the work to be done in the survey of clubs were read, also excerpts from the Wagner Bill. A committee was appointed to work with the Doctors' Advisory Board on the Wagner Bill. At the February meeting the time was spent in discussing the exhibit that was sent to the A. M. A. meeting in New York. On April 1st the Auxiliary entertained Mrs. Tinney and Mrs. Fred Wishard at a luncheon in North Manchester. Also in April the Auxiliary, in conjunction with the County Federation of Clubs, sponsored a cancer control meeting in Wabash.

REFERENCE COMMITTEES—1940

1. SECTIONS AND SECTION WORK:
Chairman, J. E. Ferrell, Fortville (Hancock)
M. F. Boulden, Frankfort (Clinton)
G. H. Kamman, Seymour (Jackson)
H. H. Ward, Coalmont (Clay)
A. A. Thompson, Tyner (Marshall)

2. RULES AND ORDER OF BUSINESS
Chairman, A. E. Stinson, Rochester (Fulton)
Carl Clark, Oakland City (Gibson)
H. S. McKee, Greensburg (Decatur)
P. T. Holland, Bloomington (Monroe)
E. F. Boggs, Indianapolis (Marion)

3. MEDICAL EDUCATION AND HOSPITALS
Chairman, J. T. Oliphant, Farmersburg (Sullivan)
W. P. Morton, Indianapolis (Marion)
R. G. Harkness, Terre Haute (Vigo)
C. V. Rozelle, Anderson (Madison)
G. M. Rosenheimer, S. Bend (St. Jos.)

4. PUBLIC POLICY AND LEGISLATION
Chairman, E. O. Asher, New Augusta (Marion)
Paul Garber, South Whitley (Whitley)
Oran A. Province, Franklin (Johnson)
Russell W. Lavengood, Marion (Grant)
Minor Miller, Evansville (Vanderburgh)

5. PUBLICITY
Chairman, William C. Wright, Fort Wayne (Allen)
W. M. Stout, Newcastle (Henry)
R. M. Anderson, Vincennes (Knox)
B. W. Egan, Logansport (Cass)
Marshall Varble, Jeffersonville (Clark)

6. HYGIENE AND PUBLIC HEALTH
Chairman, M. C. Pitkin, Martinsville (Morgan)
J. S. Robison, Winchester (Randolph)
R. D. Spindler, Milroy (Rush)
E. Blackburn, S. Bend (St. Joseph)
W. D. Inlow, Shelbyville (Shelby)

7. AMENDMENTS TO CONSTITUTION AND BY-LAWS
Chairman, H. C. Metcalf, Connersville (Fayette)
C. G. Kern, Lebanon (Boone)
C. E. Carney, Delphi (Carroll)
Max M. Gitlin, Bluffton (Wells)
Ralph Lochry, Indianapolis (Marion)

8. REPORTS OF OFFICERS
Chairman, E. C. Yoder, Goshen (Elkhart)
T. Z. Ball, Crawfordsville (Montgomery)
J. O. Ritchie, Indianapolis (Marion)
E. E. Shrock, Amboy (Miami)
F. E. Keeling, Portland (Jay)

9. COMMITTEE ON CREDENTIALS
Chairman, W. F. Carver, Albion (Noble)
Will Thompson, Liberty (Wayne-Union)
J. W. Bowers, Fort Wayne (Allen)
Walter Kelly, Indianapolis (Marion)
W. E. Amy, Corydon (Harrison)

10. COMMITTEE ON MISCELLANEOUS BUSINESS
Chairman, Clay A. Ball, Muncie (Delaware)
Claude Paynter, Salem (Washington)
O. G. Brubaker, N. Manch'ter (Wabash)
C. R. Pettibone, Crown Point (Lake)
G. A. Thomas, Lafayette (Tippecanoe)

11. SPECIAL COMMITTEE ON HEALTH INSURANCE
Chairman, F. S. Crockett, Lafayette (Tippecanoe)
H. M. Baker, Evansville (Vanderburgh)
C. M. Jones, Whiting (Lake)
George Dillinger, French Lick (Orange)
J. N. Kelly, LaPorte (LaPorte)

HOUSE OF DELEGATES, INDIANA STATE MEDICAL ASSOCIATION

French Lick, October 29, 30 and 31, 1940

Delegates	*Alternates*
ADAMS	
ALLEN	
M. R. Lohman, Fort Wayne	C. B. Parker, Fort Wayne
Wm. C. Wright, Fort Wayne	R. W. Elston, Fort Wayne
M. B. Catlett, Fort Wayne	G. A. McDowell, Fort Wayne
BARTHOLOMEW	
W. L. Green, Columbus	Wm. B. Sigmund, Columbus
BENTON	
BOONE	
C. G. Kern, Lebanon	
CARROLL	
C. E. Carney, Delphi	C. L. Wise, Camden
CASS	
B. W. Egan, Logansport	W. E. Barnett, Logansport
CLARK	
Marshall Varble, Jeffersonville	Ernest Buckley, Jeffersonville
CLAY	
H. H. Ward, Coalmont	T. M. Weaver, Brazil
CLINTON	
M. F. Boulden, Frankfort	N. B. Combs, Mulberry

Delegates	*Alternates*
CRAWFORD	
DAVIESS-MARTIN	
S. L. McPherson, Washington	E. B. Lett, Loogootee
DEARBORN-OHIO	
George H. Hansell, Rising Sun	O. H. Stewart, Aurora
DECATUR	
H. S. McKee, Greensburg	Boyd L. Mahuron, Greensburg
DEKALB	
DELAWARE-BLACKFORD	
C. A. Ball, Muncie	F. E. Kirshman, Muncie
Guy Owsley, Hartford City	W. J. Molloy, Muncie
DUBOIS	
A. H. Held, Huntingburg	E. F. Steinkamp, Huntingburg
ELKHART	
A. C. Yoder, Goshen	R. A. Fleetwood, Nappanee
FAYETTE-FRANKLIN	
H. C. Metcalf, Connersville	H. N. Smith, Brookville
FLOYD	
William Weaver, New Albany	P. H. Schoen, New Albany

Delegates	Alternates
FOUNTAIN-WARREN	
J. C. Freed, Attica	John H. Hewitt, Kramer
FULTON	
A. E. Stinson, Rochester	
GIBSON	
Carl Clark, Oakland City	O. T. Brazelton, Princeton
GRANT	
Russell W. Lavengood, Marion	L. D. Holliday, Fairmount
GREENE	
Carl Porter, Jasonville	Sam Rotman, Jasonville
HAMILTON	
HANCOCK	
J. E. Ferrell, Fortville	Charles Bruner, Greenfield
HARRISON	
William E. Amy, Corydon	Carl E. Dillman, Corydon
HENDRICKS	
Joseph Smith, Plainfield	W. T. Lawson, Danville
HENRY	
Walter M. Stout, Newcastle	Wm. C. Heilman, Newcastle
HOWARD	
R. A. Craig, Kokomo	
HUNTINGTON	
C. S. Black, Warren	R. D. Meiser, Huntington
JACKSON	
G. H. Kamman, Seymour	W. Durbin Day, Seymour
JASPER-NEWTON	
R. S. Yegerlehner, Kentland	R. H. Ruhmkorff, Goodland
JAY	
F. E. Keeling, Portland	John Lansford, Redkey
JEFFERSON	
George A. May, Madison	Carl Henning, Hanover
JENNINGS	
D. W. Matthews, North Vernon	W. L. Grossman, North Vernon
JOHNSON	
Oran Province, Franklin	Wm. E. Sutton, Edinburg
KNOX	
R. M. Anderson, Vincennes	M. H. Omstead, Monroe City
KOSCIUSKO	
O. H. Richer, Warsaw	C. C. DuBois, Warsaw
LA GRANGE	
Harry G. Erwin, LaGrange	W. O. Hildebrand, Topeka
LAKE	
P. G. Row, Hammond	C. C. Brink, Gary
T. W. Oberlin, Hammond	F. A. Malmstone, Griffith
C. M. Jones, Whiting	W. H. Howard, Hammond
F. J. McMichael, Gary	R. M. Wimmer, Gary
C. R. Pettibone, Crown Point	Neal Davis, Lowell
LA PORTE	
J. N. Kelly, LaPorte	Frank Martin, Michigan City
LAWRENCE	
R. B. Smallwood, Bedford	C. B. Emery, Bedford
MADISON	
C. V. Rozelle, Anderson	C. P. McLaughlin, Pendleton
MARION	
Carl McCaskey, Indianapolis	R. J. Masters, Indianapolis
O. W. Sicks, Indianapolis	Olin B. Norman, Indianapolis
Ralph Lochry, Indianapolis	James Stygall, Indianapolis
F. M. Gastineau, Indianapolis	Clyde Culbertson, Indianapolis
Walter P. Morton, Indianapolis	Emmett Lamb, Indianapolis
James O. Ritchey, Indianapolis	Rollin H. Moser, Indianapolis
E. F. Boggs, Indianapolis	L. H. Kornafel, Indianapolis
Walter F. Kelly, Indianapolis	C. E. Cox, Indianapolis
M. V. Kahler, Indianapolis	Brandt F. Steele, Indianapolis
E. O. Asher, New Augusta	Robert Dearmin, Indianapolis
Lacey L. Shuler, Indianapolis	G. W. Gustafson, Indianapolis
M. J. Spencer, Indianapolis	J. B. Stalker, Indianapolis
Henry F. Nolting, Indianapolis	H. G. Morgan, Indianapolis
MARSHALL	
A. A. Thompson, Tyner	
MIAMI	
E. E. Shrock, Amboy	H. E. Line, Chili

Delegates	Alternates
MONROE	
P. T. Holland, Bloomington	Neal E. Baxter, Bloomington
MONTGOMERY	
T. Z. Bail, Crawfordsville	G. A. Collett, Crawfordsville
MORGAN	
NOBLE	
W. F. Carver, Albion	H. A. Luckey, Wolf Lake
ORANGE	
George Dillinger, French Lick	Ivan Clark, Paoli
OWEN	
M. S. Brown, Spencer	C. D. Greene, Spencer
PARKE-VERMILLION	
W. D. Gerrish, Clinton	Paul Casebeer, Clinton
PERRY	
B. V. Lally, Tell City	F. C. Glenn, Tell City
PIKE	
T. R. Rice, Petersburg	L. R. Miller, Winslow
PORTER	
E. J. DeGrazia, Valparaiso	J. C. Brown, Valparaiso
POSEY	
H. E. Ropp, New Harmony	F. W. Oliphant, Mt. Vernon
PULASKI	
PUTNAM	
D. J. Steele, Greencastle	G. A. McCoy, Greencastle
RANDOLPH	
J. S. Robison, Winchester	R. W. Reid, Union City
RIPLEY	
RUSH	
Robert D. Spindler, Milroy	C. C. Atkins, Rushville
ST. JOSEPH	
Erwin Blackburn, South Bend	J. E. Lang, South Bend
A. S. Giordano, South Bend	Charles Savery, South Bend
G. M. Rosenheimer, South Bend	
SCOTT	
Marvin L. McClain, Scottsburg	Thomas N. Hill, Scottsburg
SHELBY	
W. D. Inlow, Shelbyville	P. R. Tindall, Shelbyville
SPENCER	
STARKE	
STEUBEN	
Wm. F. Waller, Angola	S. S. Frazier, Angola
SULLIVAN	
J. T. Oliphant, Farmersburg	J. H. Crowder, Sullivan
SWITZERLAND	
R. M. Copeland, Vevay	L. H. Bear, Vevay
TIPPECANOE	
Earl Van Reed, Lafayette	R. R. Calvert, Lafayette
Gordon A. Thomas, Lafayette	O. L. McCay, Romney
TIPTON	
VANDERBURGH	
Minor Miller, Evansville	J. H. McCool, Evansville
R. R. Acre, Evansville	C. W. Cullnane, Evansville
P. E. Yunker, Evansville	M. S. Durkee, Evansville
VIGO	
O. R. Spigler, Terre Haute	E. O. Nay, Terre Haute
R. G. Harkness, Terre Haute	A. W. Cavins, Terre Haute
WABASH	
O. G. Brubaker, N. Manchester	
WARRICK	
P. B. Hoover, Boonville	C. L. Luckett, Boonville
WASHINGTON	
Claude Paynter, Salem	Donald Colglazier, Salem
WAYNE-UNION	
Will Thompson, Liberty	H. P. Ross, Richmond
WELLS	
Max M. Gitlin, Bluffton	A. C. Nickel, Bluffton
WHITE	
J. P. Galbreath, Burnettsville	H. B. Gable, Monticello
WHITLEY	
Paul Garber, South Whitley	

LIST OF PRESIDENTS OF THE INDIANA STATE MEDICAL ASSOCIATION SINCE ITS ORGANIZATION

Name and Residence	*Elected*	*Served*
*Livingston Dunlap, Indianapolis	1849	1849
*William T. S. Cornett, Versailles	1849	1850
*Asahel Clapp, New Albany	1850	1851
*George W. Mears, Indianapolis	1851	1852
*Jeremiah H. Brower, Lawrenceburg	1852	1853
*Elizur H. Deming, Lafayette	1853	1854
*Madison J. Bray, Evansville	1854	1855
*William Lomax, Marion	1855	1856
*Daniel Meeker, LaPorte	1856	1857
*Talbott Bullard, Indianapolis	1857	1858
*Nathan Johnson, Cambridge City	1858	1859
*David Hutchinson, Mooresville	1859	1860
*Benjamin S. Woodworth, Fort Wayne	1860	1861
*Theophilus Parvin, Indianapolis	1861	1862
*James F. Hibberd, Richmond	1862	1863
*John Sloan, New Albany	1863	1864
*John Moffett (acting), Rushville	1864	1864
*Samuel M. Linton, Columbus	1864	1864
*Myron H. Harding, Lawrenceburg	1865	1865
*Wilson Lockhart (acting), Danville	1865	1866
*Vierling Kersey, Richmond	1866	1867
*John S. Bobbs, Indianapolis	1867	1868
*Nathaniel Field, Jeffersonville	1868	1869
*George Sutton, Aurora	1869	1870
*Robert M. Todd, Indianapolis	1870	1871
*Henry P. Ayres, Fort Wayne	1871	1872
*Joel Pennington, Milton	1872	1873
*Isaac Casselbery, Evansville	1873	1874
*Wilson Hobbs, Knightstown	1873	1874
*Richard E. Haughton, Richmond	1874	1875
*John H. Helm, Peru	1875	1876
*Samuel S. Boyd, Dublin	1876	1877
*Luther D. Waterman, Indianapolis	1877	1878
*Louis Humphreys, South Bend	1878	——
*Benj. Newland (acting), Bedford (v.-p.)	1878	1879
*Jacob R. Weist, Richmond	1879	1880
*Thomas B. Harvey, Indianapolis	1880	1881
*Marshall Sexton, Rushville	1881	1882
*William H. Bell, Logansport	1882	1883
*Samuel E. Munford, Princeton	1883	1884
*James H. Woodburn, Indianapolis	1884	1885
*James S. Gregg, Fort Wayne	1885	1886
*General W. H. Kemper, Muncie	1886	1887
*Samuel H. Charlton, Seymour	1887	1888
*William H. Wishard, Indianapolis	1888	1889
*James D. Gatch, Lawrenceburg	1889	1890
*Gonsolvo C. Smythe, Greencastle	1890	1891
*Edwin Walker, Evansville	1891	1892
*George F. Beasley, Lafayette	1892	1893
*Charles A. Daugherty, South Bend	1893	1894
*Elijah S. Elder, Indianapolis	1894	1895
Charles S. Bond (acting) Richmond	1894	1895
*Miles F. Porter, Fort Wayne	1895	1896
*James H. Ford, Wabash	1896	1897
William N. Wishard, Indianapolis	1897	1898
*John C. Sexton, Rushville	1898	1899
*Walker Schell, Terre Haute	1899	1900
*George W. McCaskey, Fort Wayne	1900	1901
*Alembert W. Brayton, Indianapolis	1901	1902
*John B. Berteling, South Bend	1902	1903
*Jonas Stewart, Anderson	1903	1904
*George T. MacCoy, Columbus	1904	1905
*George H. Grant, Richmond	1905	1906
*George J. Cook, Indianapolis	1906	1907
*David C. Peyton, Jeffersonville	1907	1908
*George D. Kahlo, French Lick	1908	1909
*Thomas C. Kennedy, Shelbyville	1909	1910
*Frederic C. Heath, Indianapolis	1910	1911
*William F. Howat, Hammond	1911	1912
*A. C. Kimberlin, Indianapolis	1912	1913
*John P. Salb, Jasper	1913	1914
*Frank B. Wynn, Indianapolis	1914	1915
*George F. Keiper, Lafayette	1915	1916
*John H. Oliver, Indianapolis	1916	1917
Joseph Rilus Eastman, Indianapolis	1917	1918
William H. Stemm, North Vernon	1918	1919
Charles H. McCully, Logansport	1919	1920
*David Ross, Indianapolis	1920	1921
William R. Davidson, Evansville	1921	1922
*Charles H. Good, Huntington	1922	1923
*Samuel E. Earp, Indianapolis	1923	1924
E. M. Shanklin, Hammond	1924	1925
C. N. Combs, Terre Haute	1925	1926
Frank W. Cregor, Indianapolis	1926	1927
George R. Daniels, Marion	1926	1928
Charles E. Gillespie, Seymour	1927	1929
Angus C. McDonald, Warsaw	1928	1930
Alois B. Graham, Indianapolis	1929	1931
Franklin Smith Crockett, Lafayette	1930	1932
Joseph H. Weinstein, Terre Haute	1931	1933
Everett E. Padgett, Indianapolis	1932	1934
*Walter J. Leach, New Albany	1933	1935
Roscoe L. Sensenich, South Bend	1934	1936
*Edmund Dougan Clark, Indianapolis	1935	1937
Herman M. Baker, Evansville	1936	1938
Edmund M. Van Buskirk, Fort Wayne	1937	1939
Karl R. Ruddell, Indianapolis	1938	1940

* *Deceased*

DATA REGARDING PREVIOUS ANNUAL SESSIONS

Year	*Session*	*Place*	*Attendance*
1908	59th	French Lick	312
1909	60th	Terre Haute	421
1910	61st	Fort Wayne	450
1911	62nd	Indianapolis	748
1912	63rd	Indianapolis	590
1913	64th	West Baden	312
1914	65th	Lafayette	527
1915	66th	Indianapolis	646
1916	67th	Fort Wayne	381
1917	68th	Evansville	270
1918	69th	Indianapolis	388
1919	70th	Indianapolis	
1920	71st	South Bend	421
1921	72nd	Indianapolis	550
1922	73rd	Muncie	522
1923	74th	Terre Haute	823
1924	75th	Indianapolis	1,012
1925	76th	Marion	800
1926	77th	West Baden	900
1927	78th	Indianapolis	1,500
1928	79th	Gary	892
1929	80th	Evansville	814
1930	81st	Fort Wayne	1,115
1931	82nd	Indianapolis	1,033
1932	83rd	Michigan City	904
1933	84th	French Lick	637
1934	85th	Indianapolis	1,814
1935	86th	Gary	1,011
1936	87th	South Bend	1,150
1937	88th	French Lick	1,154
1938	89th	Indianapolis	1,751
1939	90th	Fort Wayne	1,332
1940	91st	French Lick	?

Exhibitors

Booth Number	
1	ELI LILLY & CO., INDIANAPOLIS
2	E. R. SQUIBB AND SONS, NEW YORK
3	LUZIER'S, INC., KANSAS CITY, MO.
4	SMITH, KLINE & FRENCH LABS., PHILADELPHIA
5	PARKE, DAVIS & CO., DETROIT, MICHIGAN
6-7	THE COCA-COLA CO., ATLANTA, GEORGIA
8	
9	KELLEY-KOETT MFG. CO., INC., COVINGTON, KY.
10-11	PITMAN-MOORE COMPANY, INDIANAPOLIS
12	SHARP & DOHME, INC., PHILADELPHIA
13	THE LIEBEL-FLARSHEIM CO., CINCINNATI
14	DICK X-RAY COMPANY, ST. LOUIS, MISSOURI
15	W. B. SAUNDERS CO., PHILADELPHIA
16-17	MEAD JOHNSON & CO., EVANSVILLE, INDIANA
18	LEDERLE LABORATORIES, INC., NEW YORK
19	WHITE LABORATORIES, INC., NEWARK, N. J.
20	JOHN WYETH & BROTHER, INC., PHILADELPHIA
21	
22	
23	SCHERING CORPORATION, BLOOMFIELD, N. J.
24	A. S. ALOE COMPANY, ST. LOUIS, MISSOURI
25	CHEMICO LABORATORIES, INC., INDIANAPOLIS
26	HORLICK'S MALTED MILK CORP., RACINE, WIS.
27	STOKELY BROTHERS & CO., INC., INDIANAPOLIS
28	WINTHROP CHEMICAL CO., INC., NEW YORK
29	PETROLAGAR LABORATORIES, INC., CHICAGO
30	HOLLAND-RANTOS COMPANY, INC., NEW YORK
31	THE MEDICAL PROTECTIVE CO., FORT WAYNE, IND.
32	AMERICAN MEDICAL BUSINESS BUREAU, INC., FT. WAYNE, IND.
33	NATIONAL LIVESTOCK AND MEAT BOARD, CHICAGO
34	BROOKS DENHARD SURGICAL INSTRUMENT CO., LOUISVILLE

Booth 1

ELI LILLY AND COMPANY

Indianapolis

Eli Lilly and Company produced the first commercial preparation of Insulin, contributed to development of liver therapy, and has been responsible for many other therapeutic advancements.

Information concerning all Lilly products will be available at the Lilly exhibit where "Merthiolate" (Sodium Ethyl Mercuri Thiosalicylate, Lilly), "Sodium Amytal" (Sodium Iso-amyl Ethyl Barbiturate, Lilly), and other important products will be featured.

Our representative, Mr. E. H. Schaffer, will be in attendance at the convention.

* * *

Booth 2

E. R. SQUIBB & SONS

New York

E. R. Squibb & Sons cordially invite physicians attending the Indiana State Medical Association convention to visit the Squibb exhibit in booth No. 2. Important and interesting Squibb Vitamin, Glandular, Arsenical and Biological Products will be featured, as well as a number of interesting new items, including Sulfathiazole and Thyloquinone. Well informed Squibb representatives will be on hand to welcome you and to supply any information desired on the products displayed. Mr. W. J. Schwalb will be in charge.

Booth 3

LUZIER'S, Inc.

Kansas City, Mo.

Luzier's Fine Cosmetics and Perfumes will be on display in Booth 3 at the Indiana State Medical Convention. These preparations are selected to suit individual cosmetic requirements and preferences. In specific cases of contact dermatitis and cutaneous manifestations of allergy, raw materials may be had for patch-testing. Trained attendants will be present to explain this cosmetic service in detail.

Mr. and Mrs. D'Arcy, Mr. and Mrs. Auffenberg, Mrs. Conner, and Mrs. Broeker will be in attendance at the convention.

* * *

Booth 4

SMITH, KLINE & FRENCH LABORATORIES

Philadelphia, Pa.

Smith, Kline & French Laboratories invite physicians to stop at booth No. 4 to obtain complimentary samples of Benzedrine Inhaler. Representatives will be glad to answer questions about all S. K. F. specialties, and physicians may help themselves from convenient literature dispensers without the bother of leaving their names. Physicians will not be solicited to register.

* * *

Booth 5

PARKE DAVIS & COMPANY

Detroit

Featured at the Parke-Davis exhibit will be the sex hormones, Theelin and Theelol; anti-syphilitic agents, such as Mapharsen and Thio-Bismol posterior lobe preparations including Pituitrin, Pitocin and Pitressin, and various Adrenalin Chloride Preparations.

Messrs. B. E. Anderson, G. J. Pudil, and B. C. Dell will be in attendance at the exhibit booth.

* * *

Booths 6 and 7

COCA COLA COMPANY

Atlanta, Ga.

Coca-Cola will be served to the delegates with the compliments of the Coca-Cola Company.

* * *

Booth 9

THE KELLEY-KOETT MFG. CO.

Covington, Ky.

The Kelley-Koett Mfg. Co. was the first company to manufacture x-ray equipment in the United States and has for the past forty years been the leader in the design and manufacture of high grade x-ray equipment.

On display will be an x-ray unit especially designed for the medium sized institution or private practice providing for all types of x-ray diagnosis, both radiographic and fluoroscopic. It consists of a 100 milliampere generator and a control with new engineering features greatly simplifying operation. Completely shockproof, it assures safety as well as high quality results. The sturdy tilt table has a built-in bucky diaphragm and fluoroscope, and employs a shockproof, oil immersed, double focus x-ray tube. Also on display will be a new portable x-ray unit of sufficient capacity and flexibility to give results comparable with many big machines.

Exhibit Personnel: Scott W. Smith, Indianapolis Branch Manager; B. J. Anderson, Serviceman.

* * *

Booths 10 and 11

PITMAN-MOORE COMPANY

Indianapolis

Pitman-Moore Company, Indianapolis, invites its many friends in the profession to make its booth, spaces 10 and 11, their headquarters during the meeting. Although plans for

the exhibit were still in the formative stage at the time when copy for the convention number of THE JOURNAL had to be in the hands of the printer, the Company expects to live up to its reputation for installing exhibits of more than passing interest to the profession. Personnel from the Pitman-Moore pharmaceutical laboratories in Indianapolis and the biological laboratories at Zionsville, as well as members of the Indiana sales force, will be in attendance.

* * *

Booth 12

SHARP & DOHME, Inc.

Philadelphia

Sharp & Dohme will have their new modern display at Booth No. 12 this year, featuring Propadrine Hydrochloride Products, "Lyovac" Bee Venom Solution, and other "Lyovac" Biologicals. There will also be on display a group of new pharmaceutical specialties and biologicals prepared by this house, such as Rabellon, Daldrin, Padrophyll, Elixir Propadrine Hydrochloride, Riona, Depropanex, and Ribothiron. Capable, well-informed representatives will be on hand to welcome physicians and furnish information on Sharp & Dohme products.

* * *

Booth 13

LIEBEL-FLARSHEIM CO.

Cincinnati

Liebel-Flarsheim, Cincinnati, Ohio, will exhibit the well-known L-F Short Wave Generators as well as the famous Bovie Electro-Surgical Units, the Raysun Therapeutic Lamp and other new and useful physical therapy apparatus.

A cordial invitation is extended to visit the Liebel-Flarsheim Booth No. 13 to inspect this new apparatus and have it demonstrated to you. The booth will be in charge of L-F representative, Mr. Joe Marsh, of the Dick X-Ray Co., Indianapolis.

* * *

Booth 14

THE DICK X-RAY COMPANY

Indianapolis

The Dick X-Ray Company will exhibit Westinghouse X-Ray equipment and the famous Liebel-Flarsheim Bovie Electro-surgical Unit and Short Wave Generators. The Company will be represented by its Indiana men, L. E. Summers, Branch Manager, Roy Hinman, Joe Marsh, and Dr. Carl F. Dick. We cordially invite the members of the Indiana State Medical Association to visit our booth, see the new models and renew old friendships.

* * *

Booth 15

W. B. SAUNDERS COMPANY

Philadelphia

This publishing house will exhibit a complete line of its books on medicine and the allied biologic sciences. Of unusual importance are the following new books: Pelouze's "Office Urology," Graybiel & White's "Electrocardiography in Practice," Novak's "Gynecologic and Obstetric Pathology," Windle's "Physiology of the Fetus," Wilder's "Clinical Diabetes Mellitus and Hyperinsulinism," Walters & Snell's "Gallbladder Diseases," Buckstein's "Roentgenology of the Alimentary Tract," Riddle's "Injection Treatments"; and the following important new editions: Ewing's "Neoplastic Diseases," Cecil's "Medicine," Arey's "Developmental Anatomy," MacCallum's "Pathology," Howell's "Physiology," Levine's "Clinical Heart Disease," Christopher's "Minor Surgery," Major's "Physical Diagnosis," Boyd's "Preventive Medicine," Pearl's "Medical Biometry," and many others.

Booths 16 and 17

MEAD JOHNSON & COMPANY

Evansville

Mead Johnson & Company at Booths 16 and 17 will exhibit several new products in addition to Dextri-Maltose, Pablum and Oleum Percomorphum. They will also have on display various examples of the slogan "Servamus Fidem"—We Are Keeping the Faith.

* * *

Booth 18

LEDERLE LABORATORIES, Inc.

New York

The Lederle Exhibit at the annual meeting will feature their well known Globulin Modified Antitoxins which have demonstrated since their development in 1935 the fact that with this patented digestive process of refining they have eliminated almost 100% the protein factors which are the cause of delayed serum reactions.

There will also be on display Pharmaceutical Specialties which have made Lederle one of the leading houses in the development of outstanding preparations in the medical field.

An excellent motion picture showing post-encephalitic Parkinsonism and the response to treatment with Bellabulgara (Bulgarian Belladonna) will be shown at the booth throughout the meeting.

In attendance at the exhibit will be the Indiana representatives Mr. Carwin, Mr. Caverly and Mr. Marley.

* * *

Booth 19

WHITE LABORATORIES, Inc.

Newark, N. J.

White Laboratories, Inc., will present White's Cod Liver Oil Concentrate Liquid, Tablet and Capsule and White's Thiamin Chloride Tablet—all Council-Accepted.

Well-trained, courteous representatives will be in attendance to discuss the practical advantages provided by Cod Liver Oil Concentrate as an economical and convenient measure of Vitamin A and D prophylaxis and therapy. Pertinent information concerning our newer knowledge of the vitamins and vitamin deficiency states, together with literature descriptive of the clinical merit of the products of White Laboratories, will be offered for the registrant's consideration.

* * *

Booth 20

JOHN WYETH & BROTHER, INC.

Philadelphia

You are cordially invited to visit Booth Number 20 where John Wyeth and Brother will exhibit pharmaceutical specialties.

* * *

Booth 23

SCHERING CORPORATION

Bloomfield, New Jersey

Schering's representatives cordially invite the attending physicians to visit their exhibit. Neo-Iopax, an outstanding radiopaque media for use in urographic diagnosis, is being shown. The visualization of the urinary tract, by both excretory and retrograde methods, to reveal details of its anatomy and functions will be discussed. Latest developments in hormone therapy will be outlined. Dr. William Bond will be in charge, assisted by Mr. Arthur Peterson and Mr. Carl Suding.

* * *

Booth 24

A. S. ALOE COMPANY

St. Louis, Mo.

A. S. Aloe Company, in space No. 24, will exhibit an interesting display comprising a wide range of the latest in

medical and surgical equipment. This booth will feature the most complete line of Stainless Steel instruments in the country. Specialties will include the new Washington University Portable Obstetric Table, the Aloe Short Wave unit, and the famed Aloe Steeline furniture for the treatment room. The booth will be in charge of Aloe representatives Curtis, Oldfather and Dwinell.

* * *

Booth 26

HORLICK'S MALTED MILK CORPORATION

Racine, Wisc.

You are invited to visit the Horlick exhibit of Horlick's the Original Malted Milk, powder and tablets—Booth No. 26. Horlick's is a distinctive natural food combination containing the basic nutritive principles of full-cream milk and malted grain. Its ease of digestion, freedom from fiber and roughage together with its rich calcium and phosphorus content, particularly recommend it to the physician.

* * *

Booth 27

STOKELY BROTHERS & COMPANY

Indianapolis

The natural flavor in Stokely's Baby Foods comes from the special process used in preparing them. The special process, called COMMINUTING, produces a smooth, uniform texture. But most important, it retains to an amazing degree the natural color and the garden-fresh flavor of the specially grown Stokely fruits and vegetables used in their Baby Foods. For further details of the Stokely process and Baby Food products, visit both 27.

* * *

Booth 28

WINTHROP CHEMICAL COMPANY, Inc.

New York

Winthrop Chemical Company, Inc., extends a cordial invitation to visit Both 28 where representatives will gladly discuss the latest therapeutic contributions by this firm.

* * *

Booth 29

PETROLAGAR LABORATORIES, Inc.

Chicago

Mr. W. A. Hastings and Mr. J. H. Mann who will be in attendance at Booth No. 29, have an interesting story to tell of the numerous uses of Petrolagar for the treatment of constipation. Samples and literature pertaining to the five types of Petrolagar will be available at the booth or, if physicians prefer, will be mailed on request.

Doctors who are concerned with motion picture showings for staff meetings or classroom work will be especially interested to learn that several new films, approved by the American College of Surgeons, have been added to the Petrolagar library and are now available for bookings before recognized medical groups.

* * *

Booth 30

HOLLAND-RANTOS COMPANY, Inc.

New York

Modern contraceptive technique will be demonstrated at the booth of the Holland-Rantos Company based on the use of medically approved contraceptives—the Koromex diaphragm, the Koromex jelly, the H-R Emulsion jelly, and many other of the well known products of this Company. The display will incorporate a motion picture on this subject and another motion picture on the diagnosis and treatment of Trichomonas Vaginalis Vaginitis. Please be sure to call and get your copy of the Physician's Guide and samples of the Koromex and H-R Emulsion jelly.

Our Miss Helen Offerman, a young lady who is already well known to a great many doctors in Indiana, will be in attendance.

* * *

Booth 31

MEDICAL PROTECTIVE COMPANY

Fort Wayne

The Medical Protective Company is represented at Booth No. 31 where you are invited to call. Medical Protective Service is an institution of the medical profession whose legal liaiblity problems we have concentrated upon for 41 years. Bring your professional liability problems to Booth No. 31. Our representative is at your service to present our Protection plan, to explain the peculiar relation of the doctor to the law which governs your practice or to discuss any particular phase of Professional Liability in which you are especially interested.

Our representatives who will attend the meeting are the following: Mr. J. P. Sanford, Mr. J. D. O'Meara.

* * *

Booth 32

AMERICAN MEDICAL BUSINESS BUREAU, Inc.

Fort Wayne

The American Medical Business Bureau, Inc., will demonstrate and explain their new plan and method for servicing and collecting professional fees which has been developed after extensive research and years of experience in this field. Through our methods the physician improves his collections and reduces losses without sacrificing the good-will of his patrons.

The company will also explain its Medical Business Bureau Management Service. The purpose of this service is to supervise the operations of Medical Business Bureaus for the medical profession and in such communities as do not have a business bureau to assist the physicians to organize and put into operation such a bureau on a practical and profitable basis.

C. L. Lannin, E. L. Koenemann and B. K. Williams will be present as our representatives.

* * *

Booth 33

NATIONAL LIVE STOCK AND MEAT BOARD

Chicago, Ill.

The National Live Stock and Meat Board's exhibit portrays the role of meat as a source of the essential food elements. Thirteen ampules, each containing an essential food element in purified form, are shown. These include protein, fat, carbohydrate, calcium, phosphorus, iron, copper, and six vitamins. Wax models of foods necessary in the daily normal diet are also displayed.

Our representatives in attendance will be Anna E. Boller and Estelle Worts.

Booth 34

BROOKS DENHARD SURGICAL INSTRUMENT CO.

Louisville, Kentucky

This is your invitation to visit our booth, and we do hope you will come around and spend some time with us. Representatives who will be on hand to extend a cordial welcome will include: Messrs. R. F. Dielman, J. P. Hughes, M. A. Kuhlman, and Bob Stith.

We solicit your inquiries and are ready to fill your requirements of all medical supplies and equipment, surgical instruments, dressings, office and treatment or examining room furniture and equipment, chemicals, stains and solutions, and laboratory equipment and supplies. At your service; awaiting your call. BROOKSDEN.

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James F. Balch, M.D., Indianapolis....Dec. 31, 1942
E. L. Van Buskirk, M.D., Lafayette....Dec. 31, 1942

OCTOBER, 1940

Editorials

PLATFORM OF THE AMERICAN MEDICAL ASSOCIATION

The American Medical Association advocates:

1. The establishment of an agency of federal government under which shall be coordinated and administered all medical and health functions of the federal government exclusive of those of the Army and Navy.

2. The allotment of such funds as the Congress may make available to any state in actual need for the prevention of disease, the promotion of health and the care of the sick on proof of such need.

3. The principle that the care of the public health and the provision of medical service to the sick is primarily a local responsibility.

4. The development of a mechanism for meeting the needs of expansion of preventive medical services with local determination of needs and local control of administration.

5. The extension of medical care for the indigent and the medically indigent with local determination of needs and local control of administration.

6. In the extension of medical services to all the people, the utmost utilization of qualified medical and hospital facilities already established.

7. The continued development of the private practice of medicine, subject to such changes as may be necessary to maintain the quality of medical services and to increase their availability.

8. Expansion of public health and medical services consistent with the American System of democracy.

OUR PRESIDENT

Karl Raymond Ruddell was born near Robinson, Illinois, July 19, 1887, his father being a farmer. He graduated from Robinson High School and later from Indiana University, receiving his degree of Doctor of Medicine from that institution in 1911. He served his year of internship at St. Vincent's Hospital in Indianapolis and thereafter for a period of eight years was resident anesthetist in the same institution. He engaged in private practice in Indianapolis in 1921, soon after limiting his practice to surgery.

Dr. Ruddell was president of the Indianapolis (Marion County) Medical Society in 1936 having before that time served as a member of the society's council.

In 1913, Dr. Ruddell married Margaret Hannon of Indianapolis and they have two children, Mary Margaret and Keith Ruddell, both in Columbia University in New York. Mary Margaret is completing her work for a master's degree in fine arts; Keith is in his third year of medicine.

"Rud," as he is best known to his intimates, is an enthusiast for most sports, finding time to engage in golf and fishing and in between times becoming a disciple of Culbertson. He is a regular attendant at football, baseball and basketball games. (His biographer, in sending data to The Journal concerning this man, failed to state that "Rud" for some time at least was an addict of the noble game of poker. The writer recalls having administered to him a darned good licking on several occasions.)

During Dr. Ruddell's term of office, the economic situation and other problems of the profession have increased so that the president of the Indiana State Medical Association has found it necessary to devote more than the usual amount of time to some of these problems, but "Rud" met all the emergencies and invariably seemed to have the correct answer for all the problems as they arose.

"PUBLIC RELATIONS"

The above phrase has come to be one very commonly used in the past few years. So often do we see it in our daily press and in the various magazines that have come to be such an important part of our literary life that we dismiss the thought that may come to us when we see these two words, probably because we had not felt that we were directly connected with them. Certain it is that most medical men have given little thought to the subject of public relations in medicine; we must admit that until some months ago we had little concern with such a topic.

A frank discussion of this subject, written by Rollen W. Waterson, executive secretary for the Lake County society, appears in the September issue of the *Lake County Medical News*. It is the end result of several months of study of the subject by Mr. Waterson and he presents therein a case so

strong that there is little opportunity for dispute. For some time past the Council of this society has discussed various phases of the question and finally commissioned a committee to "boil down" all the various recommendations and present to the council a tangible plan that might be workable.

The whole problem is based upon the fact that the medical profession is sorely in need of a better relation with the public. Most of us will admit that we need this thing. It is not planned to accomplish this in Lake County by any sort of press-agentry; actually that sort of thing is to be avoided. Nor is any propaganda plan to be used. As Mr. Waterson so aptly points out, what we most need is to convince the public that we are sincere in our desire to be of service.

Two or three quotations from the article will suffice to explain the views of the writer on some of the points under discussion:

"First, the relations within the profession, although vastly improved, must approach perfection before there can be good relations with the public. If, because of competition, each physician were to tell his patients that another physician is bad, or incompetent, or insincere, or dishonest, then the public will have it on the authority of the medical profession that the profession is bad, incompetent, insincere and dishonest." Then comes a quotation from Paul Garrett, much to the same point: "The most obvious lesson that any company can learn is that good relations outside grow from good relations inside. If there is any secret to success in building good relations, it is that you must begin at home and work out."

One other point is equally well stressed, when Waterson says, "Every doctor who speaks disparagingly of another member of his local society tears away just one more stone from the foundation upon which is built public confidence in his profession. If his colleague deserves criticism *to a patient*, he deserves to be censured by or to be removed from membership in the ethical organization of physicians, and it is the fault-finding physician's duty to present the facts for judgment by the society and not by the lay public."

A final quotation seems very apropos:

"Second, the profession must be prepared to speak, with honesty and accuracy, regarding the quality of service it renders. How could one, by any stretch of the imagination, expect to engage in public relations without being prepared to comment upon and answer questions regarding the quality of the very thing that is to be sold? It is quite natural that the public should want to know about the quality of medical care that is available in Lake County, and, when questions of this sort go unanswered, mistaken conclusions are not only possible, but quite probable."

Just what does all this mean? There can be but the one answer. As we often have remarked, never before in the history of the greatest of the professions have we been assailed as in the past few years. Some of the attacks upon us have been of the blitzkrieg variety, but we have withstood them all; we have refuted every argument that has been used against us. But no longer can we continue to condone errors of commission, errors of omission; no longer can we defend incompetency, chicanery and irregularity. Organized medicine is at the bar—not the cross roads, as some would have it. The way is clear; shall we take it?

PREPAREDNESS—ONCE MORE

At the risk of being accused of iteration, we again refer to the preparedness program of both the American Medical Association and the Indiana State Medical Association. Each of these organizations has solicited a statement from *you* as to what may be expected of *you* in such a program; just what will be *your* attitude, if and when? More, in the event that the present state of chaos prevalent throughout the greater part of the "civilized" world does not in the immediate future embroil us—the largest single non-combatant nation—in the present "hell on earth," what will be your contribution to a preparedness program for the entire country?

As of September 6th, some 52 percent of the nearly 180,000 questionnaires sent to American physicians by the American Medical Association have been answered, practically every one of which gives unequivocal assurance that the signer is 100% for the program. Due to vacations, changes of address, etc., it is probable that several thousand of the letters have not yet come to the personal attention of those to whom they were addressed.

However, knowing the proclivity of many physicians to "pigeon-hole" such communications until the physician has "time" to attend to such matters, we are of the opinion that thousands of medical men have not indicated their willingness to do their part through sheer neglect. It is to this group that these lines are directed. We would remind them that the Mad Men of Europe are neglecting nothing; they do not overlook the bombing of cities, regardless of the presence therein of munitions plants, etc. They have not neglected to sink neutral shipping, regardless of the cargo. In short, they are overlooking nothing that will add to the most damnable carnage in the history of the world!

You are not being asked to enlist in an army; you are but asked to register as to what part you may be able to take in the National Preparedness Program. You are asked to register your willingness to do what you can to make the American people safe in the future.

At present, these duties are chiefly concerned with two things, the manning of "draft boards," and the planning of the health of the folk who will remain at their homes, war or no war. It is patent that some form of conscription law will be enacted soon, perhaps before this reaches the

printed page. American Medicine, months ago, announced to the entire country that they would be ready when the call came. Well, we are ready; we can man the draft boards; we can and will plan to care for the home folk, but have *you* indicated what *you* will do in this emergency?

It may be true that *sixty* percent of the medical profession will be able to answer all the demands made upon it in the present crisis, but *one hundred percent* enrollment will strike more terror in certain European quarters! We are asking but little, but that *united* "little" will do much to hearten those who so valiantly are speeding up this program for preparedness.

For the sake of humanity, for the sake of your profession, *for your own sake*, complete that questionnaire NOW and get it in the mails!

WILLIAM ALLEN PUSEY, M.D.

Organized medicine lost a fast friend when Dr. William Allen Pusey died recently at his home in Chicago. A native of Kentucky, Dr. Pusey spent practically all his professional career in Chicago where he was engaged in the specialty of dermatology. He was regarded as one of the foremost men in this specialty, not only in this country but throughout the entire world. His writings in the various magazines and his work on dermatology were recognized in every country.

Not only in his specialty but in various other phases of medicine did Dr. Pusey achieve an enviable reputation. As a speaker at medical gatherings, as an authority on medical economics, as a guest speaker at dinner meetings of medical gatherings and as a raconteur, Dr. Pusey was *par excellence*. In addition, he was a lovable character; his well modulated voice carried with it the assurance that this man was but speaking his convictions.

Dr. Pusey served in various official capacities in The American Medical Association and was honored by being elected to the presidency of that organization.

It was very interesting to watch Dr. Pusey at the various national medical meetings he was wont to attend. In the interims between papers, at the round table luncheons, and in the lobbies of the hotels, Dr. Pusey ever was surrounded by a group of his admirers eager to hear what he had to say. He had the happy faculty of expressing himself in a few words, but making his thought clear to his hearers.

A few years ago he was the guest speaker at a meeting of the Indiana State Medical Association at Gary, at which time he made a host of new friends. We liked Dr. Pusey; he was so approachable. We shall miss him much and, most of all, we shall miss that little Christmas reminder, his personal Christmas card, that came to our desk from year to year. We like to remember that this little card represented the man, himself; it was evident that he had given much thought to its selection and we are pleased that we have preserved them through the years. Would that there were more men of the type of William Allen Pusey in our profession! *Peace to his ashes!*

Editorial Notes

The Time: October 29, 30, and 31, 1940.

The Place: French Lick, Indiana.

The Event: Annual Session of the Indiana State Medical Association.

* * *

Several writers have commented upon the five-day treatment of syphilis, most of them agreeing that cases for this type of treatment should be very carefully selected and that such cases should be strictly limited to primary infections. The group of cases thus treated is not sufficient for an extended, authentic opinion as to its efficacy and it is strongly recommended that no haste be used in adopting this plan of treatment.

* * *

Some time ago we wrote regarding the prevalence of certain of the once-called "tropical diseases" in this country, attributing their presence chiefly to international airplane traffic. Now, as the *Journal of the American Medical Association* points out, September 14th, we find beriberi quite prevalent in this country. Dr. Soma Weiss, of Boston, says that in the Orient it commonly is believed to be caused by the continued use of polished rice. In this country alcoholism is a common factor in the causation of this disease.

* * *

The Council of Dental Therapeutics has somewhat to say regarding mouth washes and the extravagant claims made for these preparations by their manufacturers. The Council seems to have concluded that such preparations accomplish little save to assist in the removal of food particles by mechanical action, and suggests that water probably would accomplish about the same results, at much less cost. Further, the Council insists that the indiscriminate use of certain zinc chloride solutions, as well as those containing phenol, formaldehyde, etc., is harmful to the oral mucosae.

* * *

Comes now a press story regarding a Texas physician who, it seems, has a practice that covers an unusual country range. According to the news story, this doctor has equipped a modern trailer as a consultation and operating room, thus carrying his "office" to the patient, no matter where

located. This may be the answer to the prayer of the Spencer, Indiana, writer, concerning whom we made editorial comment some time ago. It reminds us that it is a long way from the horseback, saddle-bag physicians, such as we knew back in the Wildcat days.

* * *

Group Hospital Service, Inc., St. Louis, ended its fourth year on May 1, 1940. During the year there was an increase in contracts of 47.3 percent, while the number of persons protected increased 67.3 percent. The greatest increase was in coverage for husband and wife and families. The net increase for single persons was 33.1 percent, for man and wife—89.1 percent, and for families—76.2 percent. There were 10.2 percent of cancellations during the year. In April, 1940, this organization had 60,583 contracts in force, covering 115,754 persons.—*Jour. Missouri State Med. Assoc.*, September, 1940.

* * *

It is not too early to be casting about for officers of your county medical society for 1941. We do not recall a time when it was more important to have officials who are not only capable but who are willing to devote considerable time to the job. This conscription thing puts right into the lap of the medical profession about the biggest job it has had in years. In addition, we have the 1941 General Assembly to think about—and to watch! So it is most important that your society be manned by the best officers available. Better be thinking it over, now!

* * *

A contributor to "Hoosier Homespun," a "column" in the *Indianapolis News*, comments on a news story that two deer had been along a public highway near Moravia and surmised that they might have escaped from a state park. Lord bless you, Indiana has more than four hundred of these animals roaming the woods down that way. The correspondent states that in time the deer may constitute a traffic hazard, which is not a bad guess. Not too many years ago, on a fishing trip in northern Wisconsin, we met several deer on the open road. We recall one old buck that for some little time disputed the right of way with us, standing with legs a-spraddle, pawing the road with a front hoof and emitting snorts which were interpreted as meaning, "I dare you!"

* * *

The September number of THE JOURNAL carried a letter from the head of a highly commercialized medical and surgical Chicago outfit in which the writer deplored the lack of medical graduates, insisting that the standards of medical education be lowered and that entrance requirements to the freshman class in our medical schools be freed from many of the numerous restrictions. The "educational" number of *The Journal of the American Medical Association*, for August 31, 1940, affords a definite answer to the gentleman from Chicago. If you will scan the various pages of this number you will be convinced that "quality" rather than "quantity" is a desideratum in medical education.

* * *

Through the activity of the Indianapolis Better Business Bureau, so capably managed by Toner Overley, the licenses of one Hiel E. Crum, of Indianapolis, have been revoked by the Indiana State Board of Medical Registration and Examination. We say "licenses," because Crum held three of them—chiropractic, naturopathic and electrotherapeutic. The hearing in the matter occupied the attention of the Board for some time and brought to light an astounding condition. From press reports it appears that Crum claimed about all the impossibles; it was brought out that he even gave treatments *in absentia* with his "etherator," a machine that he claimed would perform miracles. This Overley chap, himself, was treated as a patient by Crum and his comment regarding the visit and the consultation is interesting reading. We've been mighty slow in getting after these irregulars who procure a drugless license (some of them have as many as four different varieties) then proceed to carry on all sorts of practice, much of which is pure hokum. More power to the Better Business Bureau!

* * *

We sometimes wonder if, in our admiration for the progress that has been and is being made in the art of surgery, we give enough credit to our anesthetists who have made surgery possible? A little while ago the *Bulletin of the Staff Proceedings of the Mayo Clinic* devoted an entire number to the subject of anesthesia. In the August number of *Northwest Medicine* the leading editorial is on the subject of "The Specialty of Anesthesia." And well it might be called a specialty, for that is just what it is. In the past decade or so remarkable progress has been made in the art of anesthesia, more and more physicians adopting it as a specialty, and it has been brought up to an exceedingly high state of development. In the Washington University Extension Course recently Dr. Richard Catell, of Boston, cited the need of a special department of anesthesia for the modern hospital. We predict that in the very near future every Indiana hospital of sufficient size will adopt such a plan.

* * *

Occasionally we get quite a kick out of some of the meeting notices mailed out by county society secretaries. Over in Jay County, Secretary Taylor manages to get more printing on a postal card than

any one else we know, and it usually has a quaint style. The following, which calls attention to a meeting at which a dermatologist was to address the society, is typical:

"The skin is the only part of the body that never rests after the cord is tied. When it is not being scratched or furnishing BO it is acting as a sifter for everything from without or within. It had the first cooling and sprinkling system. It is the landing and take-off field for every irritant inside and out. Mosquitoes, lice and bedbugs would be out of luck without it. It even gives us dermatologists, and keeps them guessing at times, and us all the time. If Hoosiers are not saying, Who, Me?, they have something the matter with their skin and are too busy scratching; so it is up to us to come and learn something from this specialist. We can't stop their Who Me stuff, but we might allay their itching and thus release this energy for National Defense."

* * *

Looks like an early fall; heard the katydids, the other evening, which in Hoosier-land means six weeks until frost. It makes us think of October, and October makes us think of French Lick where hundreds of Indiana medics will gather the last week of this month. We have been in southern Indiana in all seasons and we have enjoyed every one of our visits to that Nature-land paradise, but we like the late fall best, for then Nature outdoes herself in painting scenic beauties never equalled by the greatest of artists. Then, too, somehow or other, food tastes better in the fall than at other seasons and if there is any one thing in which the Tom Taggart hostelry excels, it is food. Previous to every trip to French Lick, we declare that we are going to be most temperate in our eating, only to forget all about that intention once we arrive. But food and Nature-painting are not all that await our coming. Primarily we are gathering for scientific purposes, and such a program as has been planned is seldom met in state medical meetings. A record-breaking crowd is expected and you are reminded that it will be well to make that reservation in advance. Late comers, of course, will be accommodated, but it makes one feel good to walk up to the desk, sign on the dotted line, and hear the room clerk call out, "Boy, show Doctor Hoosier to room blankety-blank!" No waiting until they can dig up an empty room for you, but service, pronto! They tell us that reservations are unusually large, but so is the hotel, so come along, reservation or no—a hearty welcome awaits you.

* * *

The September number of *Rocky Mountain Medical Journal* carries a photostatic copy of a letter from Wendell Willkie, addressed to Dr. T. Leon Howard of Denver, Colorado, in which Mr. Willkie says: "You have asked my views on socialized medicine. I am against it. You can quote me any place on this." Recently Dr. F. S. Crockett of Lafayette, Indiana, in a personal interview with Mr. Willkie, asked a similar question and Mr. Willkie advised that he would give a written answer at a later date. This we present herewith. We regret that this did not reach us in time for the September JOURNAL; however, we have advised Mr. Roosevelt of our action in the matter and suggested that we shall be glad to print any comment that he may care to make on the subject in the November JOURNAL.

Rushville, Indiana
September 12, 1940

My dear Dr. Crockett:—

You have inquired of me my notions about so-called socialized medicine. I could write you pages covering my views on this subject. That seems to me to be unnecessary because I am against socialized medicine.

I appreciate that there is a social obligation which in some cases must be borne by government, to provide medical service for those who do not have financial means with which to provide it for themselves. The discharge of this obligation, however, should not require any change in the system under which men become skilled in the medical profession through competitive practice. I know of no group in American society who have contributed so much as the American doctors in skill, in charity, and in faithfulness.

If the government enters the field of medical attention to the unfortunate or in connection with the developing of housing centers, etc., it should work out such medical problems in connection thereto with the established medical organizations. Likewise, if there is additional legislation proposed regulating the practice of medicine or the rendering of medical service or in any collaboration thereto, the established medical organizations of the country should be consulted, advised, and conferred with.

You cannot place me too strongly on record as against the encroachment of the government into the functioning of the American professions.

Sincerely yours,

WENDELL L. WILLKIE

At press time, we learn of the tragic death of Dr. Maurice C. McKain, of Columbus, Councilor for the Fourth District. Dr. McKain was fatally injured in an automobile accident September twenty-fifth.

President's Page

SPECIALIZATION AND GENERAL PRACTICE

The remarkable advances of diagnostic and therapeutic procedures have raised American medicine to new heights of achievement. More and more modern medicine approaches its ideal of an exact science, all the while attempting to enable its students and practitioners to practice an art.

Application of these advances to the changing social and economic order of our country has not been as easy. In one thing, we are all agreed, viz: continued advance of medicine as a social force rests on more perfect harmony of the entire personnel of organized medicine.

The importance of the general practitioner or family doctor has been extolled again and again. Over-specialization has been in the same treatises, criticized vigorously. If increasing harmony in the ranks of organized medicine is necessary for social progress, strife between specialist and general practitioner must cease.

The various specialties in their inception were evolved and sustained by referred practice from the general practitioner. It has been the hope of the general practitioner that specialties would still continue to function for patients directed to them through the legitimate and logical agency of the family doctor. Such has not been the case. In increasing numbers, the public no longer seeks the advice of the family doctor but goes directly to the agency created and sustained by him. The service of the family doctor is gradually being eliminated in dozens of ways. His sphere of contact with his potential clientele is steadily contracting and yet the cry goes up by the public that they must still have their family doctor.

Day in and day out, through strenuous long hours in homes and in the office, the general practitioner must continuously be alert to the immediate case before him. With mounting technical knowledge and an increasingly critical public, the family doctor dares not relax his vigilance in days crowded with detail and demand. He must, in a brief time allotted to him for each patient, attempt to make a diagnosis, institute treatment and appraise the economic status of the patient. Then, if necessary, he must recommend the services of specialist or hospital and explain to a distracted patient or family the need of such. In a score of ways he must assume the responsibility of doctor, priest, and financial counsellor. His responsibility has begun and at the very best continues through anxious hours and days until the benefit of consultation, surgery or both has cured or improved the patient. Sadly and quite often, despite these added resources, a hopeless condition is found or death ensues and still his responsibility goes on. He must allay suffering, quiet the fears of a stricken patient and face the critical survey of the family and community.

Too often after tireless effort and conscientious service, not even thanks but adverse criticism is his reward. Often enough, cash demands of the hospitals and fees for specialists leave him with an unpaid account card in his file. The public has grown to minimize and disregard such vital services; fees of the hospitals and specialists have assumed undue proportions in their eyes. The family doctor's stock continues to go down more and more and it is difficult for him to receive his just compensation. Yet the public continues to cry for the services of the "good old family doctor."

The duty of the specialist is obvious. Now that the public has come to seek him more than ever, can he not aid greatly in restoring public appreciation for the services of the general practitioner? Can he not, with candor, emphasize and explain a rational fee service basis which will to a large degree eliminate the taint or suspicion of fee-splitting or fee-division? Much can be done if specialist and practitioner frankly explain to the patient the professional and financial responsibilities of each case.

Karl R. Ruckell

UNDER THE CAPITOL DOME

DAVIS LICENSE REVOKED

The Indiana State Board of Medical Registration and Examination revoked the license of Dr. Joseph Collington Davis of Muncie on August 30 for alleged violation of the narcotic laws. He is serving a sentence at Leavenworth Federal prison.

* * *

An examination of doctors licensed in Illinois and seeking admission to Indiana practice was conducted by the State Board of Medical Registration and Examination September 20 under a reciprocal agreement with Illinois. The examination was held at the Indiana University Medical Center.

BUREAU OF INDUSTRIAL HYGIENE IN RELATION TO NATIONAL DEFENSE PROGRAM

The Bureau of Industrial Hygiene of the Indiana State Board of Health will have an important role in connection with the Hoosier state's part in the National Defense Program, according to Dr. Verne K. Harvey, health board secretary.

National defense programs are greatly hindered when trained industrial workers succumb to an occupational disease, because the training of other workmen to take over the vacated jobs consumes time and is economically wasteful, Dr. Harvey pointed out.

"With the expansion of war industries and the increased production of other industries to meet the demands of our national defense program, the field of industrial medicine takes on an added significance," Dr. Harvey said. "The introduction of untried synthetic materials, as well as increased production schedules and improvised working conditions, will tend to increase occupational morbidity and mortality."

With this fact in mind, Dr. Harvey said, each bureau of industrial hygiene in the country is formulating its own national defense program.

As a direct approach to the problem presented by the defense program, the Bureau of Industrial Hygiene of the Indiana State Board of Health, which is under the supervision of Dr. Louis W. Spolyar, is going to make detailed studies in all of the war industries in Indiana. Approximately 200 plants and about 115,000 workers will be involved. Detailed studies, medical, engineering, and chemical, will be made with definite recommendations as to how to remedy the existing hazards that may be found.

In addition to this direct service to industry, the Bureau will cooperate with the State Department of Labor, the Indiana State Medical Association, the State Nurses' Association, and the Indiana Manufacturers' Association in the field of conservation of man power in industry.

Frequently physicians have asked what services offered by the Bureau could be of value to them. Dr. Harvey prepared the following outline to show that these services fall into three general classifications—medical, engineering, and chemical:

Medical

1. Consultation on diagnosis and prevention of occupational diseases.
2. Consultation on industrial absenteeism and method of evaluating.
3. Industrial epidemiological studies.
4. Library service on industrial diseases. Industrial library is available for use by physicians.
5. Histological studies of posted material involving industrial diseases.
6. Consultation on medico-legal aspects of occupational diseases.

Laboratory

1. Dust studies, including counts, analyses, and petrographic determinations.
2. Gas analyses and measurement of concentrations, especially carbon monoxide, hydrogen sulphide, hydrocyanic acid, methane, and explosive atmospheres.
3. Quantitative determination of volatile solvents in atmosphere, such as, carbon tetrachloride, trichlorethylene, naphtha, benzine, and benzol.
4. Quantitative analysis of heavy metals, as, lead, arsenic, cadmium, selenium, etc.
5. Analysis body fluids as hematological, basophillic aggregation tests, urine sulphate ratios in benzol poisoning, urinary leads, and asbestos bodies in sputum.
6. In general, facilities are available in this laboratory or the laboratory of the Division of Industrial Hygiene of the U. S. Public Health Service to do any type of industrial analyses that may be needed to establish a diagnosis of an occupational disease or a potentially hazardous atmosphere.

Engineering

1. Detailed plant studies and job analysis, for the patient under consideration.
2. Methods of controlling occupational diseases through engineering means.
3. Measurement of enviornmental entities as light, heat, air velocities, humidity, etc.
4. Industrial sanitation.

These services are availale free of charge, reports are confidential, and they may aid physicians in helping to establish a diagnosis of an occupational disease.

The Indiana Bureau was established two years ago. The staff consists of a physician, a ventilating engineer, an industrial chemist, and a stenographer.

STATE FAIR

The Indiana State Board of Health used a new method in showing its exhibits at the state fair this year, distributing them in various buildings and departments throughout the grounds instead of concentrating them all in the board's own buildings. Dr. Verne K. Harvey, secretary of the board, said the new plan gained a much bigger

audience for the exhibits than the old method, and the distribution method will be used again next year.

An environmental sanitation exhibit was shown in the Manufacturers' Building. This included industrial hygiene, plumbing, and an exhibit showing a Grade A restaurant kitchen. One of the most popular and instructive was "Oscar," a robot equipped with a two-way public address system. Persons at the exhibit could ask "Oscar" questions, and he gave immediate answers. It was a clever and popular way of getting the board's message across.

Physical education and recreational exhibits were installed in the 4-H Club building, and at the Conservation building the board showed rabbit fever and Rocky Mountain spotted fever exhibits. In connection with education exhibits, the health board showed a school health exhibit designed to help school administrators and teachers develop proper policies. A community sanitation exhibit also was set up.

In the health board's own buildings exhibits included a motion picture exhibit on health subjects, a complete model set-up of a local health department. There were also cooperative exhibits, shared with the Indiana State Medical Association, the state dental association, hospital association, tuberculosis association, pharmaceutical association, public health nursing association, and the Woman's Field Army for the Control of Cancer.

Dr. Harvey explained that the board sought to distribute the exhibits over the fair grounds so that each would be shown in connection with related activities.

DR. CRUM'S LICENSES REVOKED

The Indiana State Board of Medical Registration and Examination revoked the license of Dr. Heil E. Crum, Indianapolis naturopath, last month for "practice inimical to public health."

The board's action followed a rather sensational hearing.

Dr. Crum was the operator of a device which he called an "etherator," a box-like affair which the naturopath claimed diagnosed and cured human ailments. Evidence was brought out that he not only treated patients by means of his device in his own office, but also gave them absent treatments by the same means. The hearing was rather heavily attended. Among witnesses were several patients of Dr. Crum who testified to cures and improvements in their health as a result of "etherator" treatments.

The medical registration board revoked all three of the licenses held by Crum. They were chiropractic, naturopathy, and electrotherapeutics.

Dr. Crum has appealed the decision to the Marion county Circuit court.

The charges against him were filed by the Indianapolis Better Business Bureau.

Meanwhile charges were filed by the Better Business Bureau against five "hot hand healers" of Morgan county. The warrants charged George E. Clawson and his four assistants with unlawful practice of medicine. The assistants are Charles G. Clawson, a son; Paul T. Clawson, a nephew; Carl M. Travis and Clarence P. Carter.

George Clawson operated a "hospital" on Indiana highway No. 37, about two miles north of Martinsville.

Donovan A. Turk, a reporter for the Indianapolis *Star*, went to the "hospital" and took a treatment shortly before the warrants were issued. He described his experience, in part, as follows:

It was several minutes before the reporter was called into one of the several private rooms adjoining the waiting room. The room contained a small desk, two chairs and a makeshift operating table. The "doctor" questioned the "patient" for a few minutes about his "symptoms" and then began the treatment.

The "doctor" first rubs the hands of the "patient" vigorously and then places the patient on his back on the operating table. The "patient" then is subjected to a thorough massage and rubdown. The "patient" at all times wears all of his usual clothing, the "magnetic" healing being administered through the clothing.

The "doctor" explained he did not know "exactly" how he obtained his power to heal by "magnetism" but that he knew how to administer his power and cure most any disease or ailment. He reviewed several cases he said he had treated successfully.

119 PHYSICIANS LICENSED

Certificates of license to practice medicine in Indiana have been issued to one hundred and nineteen young physicians by the State Board of Medical Registration and Examination. The group, comprising 103 from Indiana and 16 from other medical schools, took the Board's examination June 18 to 20 in Indianapolis.

Those who received certificates were:

FROM INDIANA

Robert Paul Acher
Harry Aldrich
Eugene W. Austin
Robert Carl Badertscher
Edwin B. Bailey
Joseph E. Ball
William Wayne Ballou
Ernest Randall Barnett
Thomas B. Bauer
Ernest R. Beaver
Jene R. Bennett
Wilmot Burgess Boone
George Edwin Brown
Ray Henry Burnikel
Basil Kemp Byrne
Perry A. Campbell
Herbert Odell Chattin
Paul Alexander Clouse
William Cohen
Leo F. Connoy
Wendell Earl Covalt
Sam J. Davis
Paul G. Dintaman
Richard E. Dukes
Basil B. Dulin
Wallace Knapp Dyer
Edwin Ray Eaton
Paul D. Eidson
John M. Engle
Paul Vincent Evans
James R. Fant
Warren Fischer
Meredith Bye Flanigan
John J. Flick
Ephraim L. Fosbrink
Joseph Walter Freeman
Martin Douglas Garfinkel
Edgar Ellen Garland
Jerome A. Graf
S. Phillip Grillo
David Hadley
Bernard R. Hall
Emory Delois Hamilton
Daniel Milton Hare
Archibald Lee Hickman, Jr.
Eldore M. Hoetzer
Sterling P. Hoffman, Jr.
Anne Holovachka
James M. Hundley
Dean B. Jackson

Arthur N. Jay
George Monroe Jewell
Linden E. Johnson
Robert N. Kabel
Julien C. Kennedy
Carroll E. Kern
Knight L. Kissinger
John H. Kitchel
Francis J. Kubik
E. Harold Laws
Max Richard Long
Clarence Alfred Lucas, Jr.
Harry N. McClelland
James M. McIntyre
Virgil Carrol McMahan
Charles Champ McVaugh
Carl D. Martz
Robert B. Miller
Roland E. Miller
Dwain E. Mings
Leonard J. Morgrette
Charles W. Morris
Joseph E. Mullin
Alfred Niedermayer
Wyndham Hunt Nutter
Andrew C. Offutt
Abraham Miconias Owen
James D. Peirce, Jr.
Walter E. Pelczar
Robert W. Phares
Robert H. Rang
H. Lester Reed
Joseph Cedric Reed
Charles Victor Sage, Jr.
Robert Abraham Saide
James C. Schornick
Barry Sherster
Jack Courtney Shrader
Frederick H. Simmons
John F. Spahr, Jr.
Everett Bedwell Steele
John D. Stepleton
Elsworth Keene Stucky
Glenn L. Swihart
W. Mitchell Taylor
Paul DeVise Thompson
Fred L. Toumey
Walter C. Twineham
William C. Van Ness
William Morrow Webb
Donald K. Winter
Clarence Willard Worth
Dale E. York

FROM OTHER STATES

L. Walter Zeman
Katsumi Nakadate
Earl M. Spaulding
David A. Eisenberg
Benjamin F. Novack
Joseph Edward Tether, Jr.
Paul E. Huston
Reid L. Keenan
Ettor A. Campagna
Kenneth B. Fisher
Elmer Abraham Barron
Robert Theodore Hazinski
Edward T. Baumgart
Ansel V. Simon
Claude F. Otten
Harold E. Parker

Deaths

Walter Leroy Misener, M.D., of Richmond, died August twenty-ninth, aged sixty-two years. Dr. Misener practiced at Mechanicsburg following his graduation from Physio-Medical College of Indiana, Indianapolis, in 1901, and in 1912 he moved to Richmond. He served with the medical corps in the U. S. Army during the last war, and was on duty in a hospital at LaRochelle, France, for a year. He was a member of the Wayne-Union county Medical Society, the Indiana State Medical Association, and the American Medical Association.

* * *

Louis A. Bolling, M.D., retired physician, died at his home in Otterbein, September tenth. Dr. Bolling was seventy-three years old. He served with the medical corps of the Army during the last war. He had practiced medicine in Attica for twenty-three years prior to his retirement. He graduated from the St. Louis College of Physicians and Surgeons in 1897 and was a member of the Benton County Medical Society, the Indiana State Medical Association and the American Medical Association.

* * *

Jeremiah W. Trueblood, M.D., of Monroe City, died September seventh, aged eighty-eight years. Dr. Trueblood was a graduate of the Hospital College of Medicine of Louisville in 1891 and had practiced in Monroe City for nearly sixty years.

News Notes

Dr. Robert J. Miller has located at Fort Branch. Dr. Miller recently practiced at Nashville, Indiana.

Dr. C. E. Walters, of Indianapolis, and Thelma Scraper, of Indianapolis, were married August thirty-first.

Dr. J. W. Phares of Evansville has purchased the former residence and office of the late Dr. L. D. Brose.

Dr. W. J. Aagesen has opened an office in Anderson for the special practice of ophthalmology and otolaryngology.

Dr. David G. Pryor, who has been practicing in Louisville, has opened an office in the Pfau Building at Jeffersonville for the special practice of ophthalmology and otolaryngology.

Dr. C. A. Inks who has been practicing in Plymouth has returned to Nappanee where he will conduct a general practice.

Dr. Hartzell McClanahan, of Indianapolis, and Treceleah Talbert, of Indianapolis, were married August eleventh.

Dr. Karl Ruddell, of Indianapolis, was guest speaker at a meeting of the Greensburg Rotary Club, August twelfth.

Drs. Stanley A. Clark and Lester G. Ericksen of South Bend have announced the removal of their offices to 615 Sherland Building in that city where their practice will be limited to radiology.

Dr. A. D. McKinley has announced the opening of an office for general practice at 4905 West Fourteenth St., Speedway City, Indiana.

Dr. Fred M. Wilson has opened an office in the Union Bank and Trust Building at Kokomo where he will conduct a general practice. Dr. Wilson completed his internship at St. Vincent's Hospital in Indianapolis this year.

In the estate of Dr. William R. Johnston, of Charlottesville, four churches were left $2,000 each in

addition to bequests to relatives. The churches remembered in his will included the Christian, Methodist and Friends churches at Charlottesville and a Presbyterian church at Darlington, Pennsylvania.

According to newspaper reports, three physicians, Dr. W. A. Thompson of Liberty, Dr. W. L. Porter, and Dr. Fred Shepard of College Corner observed birthdays on Friday the thirteenth of September.

Dr. Earl J. Cripe has opened an office at Redkey for the general practice of medicine. Dr. Cripe recently completed his internship at Fresno, California.

Dr. Herman Baker of Evansville spoke before a meeting of health workers at Spring Mill Park, August twenty-first, when his subject was "The Place of the Public Health Worker in the National Defense Program."

The National Foundation for Infantile Paralysis, Inc., 120 Broadway, New York City, has published booklets entitled "The Use of the Respirator in Poliomyelitis" and "Respirators—Locations and Owners" copies of which may be obtained free upon request.

Dr. Lillian B. Mueller, of Indianapolis, has been made head anesthetist at the Indianapolis City Hospital. Dr. Mueller has been an anesthetist on the staff of the Indianapolis Methodist Hospital for several years and upon her resignation of this position, members of the staff of the Methodist Hospital honored her with a testimonial dinner at the Propylaeum, August twenty-ninth.

Dr. F. Park Lewis of Buffalo, N. Y., internationally known ophthalmologist, died Tuesday, September tenth, in Mather Memorial Hospital, Port Jefferson, Long Island, after a brief illness. Dr. Lewis was 85 years old. He was chiefly responsible for the founding of the National Society for the Prevention of Blindness in 1908 and the International Association for the Prevention of Blindness in 1929. He had served as vice-president of both organizations since their founding.

The American Academy of Ophthalmology and Otolaryngology will meet in Cleveland, Ohio, the week of October sixth. The following Indiana physicians' names are found in the official program: Member of the Council, C. H. McCaskey, Indianapolis; secretary of the Local and National Secretarial Group, K. L. Craft, Indianapolis; scientific program, Hedwig S. Kuhn, Hammond; conference hours in ophthalmology, C. P. Clark, R. J. Masters and C. W. Rutherford, all of Indianapolis.

A pamphlet on "Standardization of Blood Pressure Readings" has been prepared by joint committees appointed by the American Heart Association and the Cardiac Society of Great Britain and Ireland, and others. According to annual figures of the American Heart Association, leading medical schools and insurance companies are adopting the method as a standard procedure for teaching purposes and for keeping records. A pamphlet on "Examination of the Heart" published by the American Heart Association will be sent upon request with the first-mentioned booklet to any physician who will write to the American Heart Association, 50 West 50th Street, New York City.

"Pay-Your-Doctor Week," inaugurated two years ago by California Bank in Los Angeles on a purely local basis will be observed this year from October 27 to November 2 in scores of cities throughout the country with banks in the various communities sponsoring the movement. Recognizing the fairly widespread tendency to regard doctor bills as obligations that can wait indefinitely or at least until all other bills have been paid, "Pay-Your-Doctor Week" is proclaimed in order to call attention to the plight of many doctors who to their great inconvenience are on call 24 hours of every day but who are often paid at the convenience of their patients.

Because "Pay-Your-Doctor Week" was originated by a bank without the assistance of the medical profession, no question of ethics is involved and the movement has been hailed with favor by members of the medical fraternity everywhere.

Banks who sponsor "Pay-Your-Doctor Week" in various cities throughout the country publicize the idea widely, using newspaper advertisements, bill boards, car cards and the like to call attention to the occasion and to the fact that banks have on hand funds to lend for the excellent purpose of paying doctor bills.

JUNIOR MEDICAL OFFICERS SOUGHT FOR GOVERNMENT SERVICE

The U. S. Civil Service Commission has announced examinations to fill two classes of junior medical officer positions (rotating internship and psychiatric resident) at St. Elizabeths Hospital, Washington, D. C. The salary for the positions is $2,000 a year, less a retirement deduction of 3½ percent and a deduction of $60 a year for quarters, laundry, and medical attention.

For the rotating internship position, applicants must be fourth-year students in a Class A medical school; however, they cannot enter on duty until

they furnish a certificate showing completion of the medical course prior to June 30, 1941.

For the psychiatric resident position, applicants must have completed their fourth year of study in a Class A medical school subsequent to December 31, 1937, and must have the degree of B.M. or M.D. In addition, before entrance on duty they must have completed a 1 year rotating internship.

Applicants will be rated on a written examination consisting of questions designed to measure applicant's aptitude for learning and adjusting to professional duties in the service. They will also be rated on their education, experience, and fitness.

Applications must be filed with the Commission's Washington office not later than October 17, if received from States east of Colorado, and not later than October 21, 1940, if received from Colorado and States westward.

Further information regarding the examinations is contained in the formal announcement. Announcements and application forms may be obtained from the Secretary of the Board of U. S. Civil Service Examiners at any first- or second-class post office, or from the U. S. Civil Service Commission, Washington, D. C.

ASSOCIATION OF OBSTETRICIANS TO MEET IN INDIANAPOLIS, OCTOBER 10-12

The Central Association of Obstetricians and Gynecologists will hold its twelfth annual meeting at the Hotel Lincoln in Indianapolis, October 10, 11, and 12, 1940. Scientific sessions will begin daily at nine o'clock and will include papers on:

The Vaginal Smear Prior to the Manupause in Menstrual and Reproductive Disorders;
The Differential Diagnosis of Appendicitis in the Female;
The Effect of Stilbestrol and Testosterone on Lactation;
Dental Caries in Pregnancy;
Local Anesthesia in the Second and Third Stages of Labor;
Solid Teratoma of the Ovary in the Young Girl;
The Relative Effects of General and Local Anesthesia on Asphyxia Neonatorum;
Cervical Conglutination as a Factor in Delayed Labor;
The Therapeutic Value of Tubal Patency Tests in Sterility and Infertility;
Breech Delivery;
The Leukocyte Count in Labor;
Pituitary Extract for Dystocia Due to Uterine Inertia in the First Stage of Labor;
Uterine Bleeding Studied with Endometrial Biopsy;
The Economic Status of Obstetrical Care and the Effect of A P L Substances on the Ovarian Cycle of the Human.

The guest speaker will be Dr. Robert Meyer of Minneapolis who will address the Association during the Friday morning scientific session.

On Thursday afternoon a scientific program will be presented at the Indiana University Medical Center and Thursday evening there will be a stag smoker and dinner at the Columbia Club. The annual banquet of the Association will be held in the Travertine Room of the Lincoln Hotel, Friday evening, October 11th.

Various entertainments have been arranged, including a tour of the Eli Lilly & Company plant, golf at the Indianapolis Country Club, and on Saturday afternoon, those members who wish may attend the Butler-St. Xavier football game in Indianapolis. Reservations may be made with Dr. G. W. Gustafson, 23 East Ohio St., Indianapolis, who will have a section of seats available. An extensive program of entertainment for visiting ladies has been arranged.

Headquarters for the meeting and scientific sessions will be the Lincoln Hotel.

Members of the Indiana profession are invited to attend the scientific sessions. There will be no registration fee.

GOVERNMENT TO NEED TEMPORARY AND PART-TIME CIVILIAN MEDICAL OFFICERS

The expansion of the army creates a need for about 600 civilian medical officers in various grades for temporary and part-time service. The duties of full-time officers will be to act as doctors of medicine in active practice in hospitals, in dispensaries, and in the field. The duty of part-time officers will be to report for sick call at a fixed hour each day and to be subject to emergency call at all times.

The Civil Service Commission in making this announcement calls particular attention to the fact that part-time officers will be able to continue their regular practice. In order that this may be done, appointments to the part-time positions will be made of medical officers in the vicinity of the place of duty.

Information concerning these positions may be obtained from the Secretary of the Board of U. S. Civil Service Examiners at any first- or second-class post office, or from the United States Civil Service Commission, Washington, D. C. Physicians are urged to apply at once. This work is of the greatest importance to the success of the National Defense program.

INDIANA UNIVERSITY NEWS

The Indiana Advisory Health Council has considered in the past year the requirements of adequate health service for college students. Its chairman appointed a committee, headed by President Pittinger of the Ball State Teachers' College, to make a study of this matter. This committee recommends, among other things, that college physicians cooperate as fully as possible with the family physicians of students.

The Student Health Department of Indiana University will be pleased to accept the report on the physical examination of a student made by the

family physician, except for students eligible for the R. O. T. C. It reports any serious illness of a student to his family physician, who then assumes charge of the patient, or, if this is impossible, tells the department what disposition to make of him.

With an eye on foreign and domestic military movements, students of the Indiana University school of medicine have registered for the coming school year.

Taking cognizance of the particular significance of war developments to medical and nursing students, Dr. W. D. Gatch, dean of the school, urged students last fall to "avoid war hysteria and prepare yourselves thoroughly." Additions and changes in the faculty include the assignment of Major I. S. Peak, former clinical director of Pinebluff Sanitarium, Pinebluff, N.C., as instructor of military science and tactics. He succeeds Col. W. C. Von Kessler who was transferred recently to San Francisco, Cal., as commanding officer of the medical regiment of Camp Ord. Major Peak had retired from the army, but was recalled.

Appointment of Dr. Joseph E. Tether as assistant to Dr. John D. Van Nuys, director of admissions of the university hospitals, was announced. Dr. Tether is a native of Hawley, Pa., a graduate of Lehigh University, and of the Johns Hopkins School of Medicine. He has been a member of the staff of the dispensary at City Hospital.

Appointment of Dr. Alex T. Ross, former research neurologist of the Michigan Farm Colony for Epileptics, as assistant professor of neurology, also was announced. Dr. Ross was graduated from the University of Oregon Medical School in 1930, and later taught at the University of Wisconsin and the University of Michigan medical schools.

A fellowship in child study and guidance provided by the William C. Huesmann Fund has been assigned to Dr. C. Herbert Cronick.

William Douglas of Lafayette, a sophomore in the medical school, has been named assistant registrar. He fills the vacancy created by the promotion of Miss Grace Blankenship to registrar. Miss Blankenship succeeded Mark P. Helm, retired July 1 under faculty age rules.

HAVE YOU MADE
YOUR HOTEL RESERVATION
AT
FRENCH LICK?

SOCIETIES AND INSTITUTIONS

Clinton County Medical Society members met at the Clinton County Hospital, September tenth, for a dinner and business meeting. A paper entitled "Management in Poliomyelitis" was given by Dr. Gordon Batman, of Indianapolis.

* * *

Elkhart County Medical Society met September fifth at Hotel Elkhart for a dinner meeting. The first of a series of four lectures in a post-graduate course in pediatrics was presented by Dr. Archibald L. Hoyne of Chicago. His topic was "Contagious Diseases." Thirty-seven members were present.

* * *

Floyd County Medical Society members held a dinner meeting at New Albany, September thirteenth. Dr. Harry Voyles presented a paper on "The Management and Care of Diabetic Patients." Attendance numbered eighteen. The talk was illustrated with moving pictures.

* * *

Gibson County Medical Society held a meeting at the Emerson Hotel, Princeton, September ninth. Dr. H. G. Hamer, of Indianapolis, presented a paper on "Surgical Emergencies in Urological Practice." Twenty-two members were present.

* * *

Grant County Medical Society members, and members of the Grant County Bar Association and the Grant County Dental Society, held their annual outing at the Meshingomesia Country Club, August twenty-first. E. J. Wynn, of Indianapolis, gave the principal address, "Our Internal Security."

* * *

Greene County Medical Society members met at Greene County Hospital, Linton, Indiana, September twelfth. Twenty-four were present (fourteen physicians and ten members of health organizations) to consider a tuberculosis clinic by the medical school and tuberculosis association.

* * *

Howard County Medical Society held a meeting at the Frances Hotel, Kokomo, September sixth. Twenty members were present to hear the first of a series of five lectures in a post-graduate course in obstetrics under the supervision of Dr. Carl P. Huber of Indianapolis. Subject of the evening was "Antenatal Care and Management of Labor—Episiotomy and Repair."

* * *

Huntington County Medical Society held a meeting September third at Hotel Lafontaine, Huntington. Dr. William N. Wishard, Jr., presented a paper entitled "Traumatic Injuries of the Urinary Tract and Their Treatment." Fourteen members attended the meeting.

Indianapolis (Marion County) Medical Society's final golf tournament was held September eleventh at the Indianapolis Country Club.

* * *

Lake County Medical Society held its annual picnic at the Lake Hills County Club, near St. John, August fifteenth. Approximately one hundred physicians were present.

* * *

Noble County Medical Society held a meeting at Albion, August twentieth. Dr. L. T. Meiks of Indianapolis presented a paper on "Poliomyelitis." Seventeen members were present.

September sixteenth, a dinner meeting was held at Graham Coffee Shop, Albion. Doctor George B. Lake, of Waukegan, Illinois, a former member, presented a paper entitled "Psychic Factors In Disease."

* * *

Randolph County Medical Society held a meeting at the Randolph County Hospital, Winchester, September ninth. Guest speakers were Drs. W. D. Bishop, of Greenville, Ohio, and L. G. Montgomery, of Muncie. They discussed the subject "Poliomyelitis."

* * *

Tippecanoe County Medical Society members met at the Lafayette Home Hospital, September tenth. Fifty-two members were present to hear Dr. Harold S. Hulbert of Chicago present a paper on "Behavior Problems; What Can We Do?"

* * *

Vanderburgh County Medical Society held a meeting September tenth at the Hotel Vendome, Evansville. Following the business meeting, Dr. William Cockrum, of Evansville, discussed "Common Disorders of the Eyelid."

AMENDMENTS TO THE CONSTITUTION OF THE INDIANA STATE MEDICAL ASSOCIATION TO BE CONSIDERED AT THE FRENCH LICK SESSION

Resolution introduced by Dr. Ira Perry at the 1938 session:

"BE IT RESOLVED, That Section 3 of Article IX of the Constitution be amended as follows:

"By striking out the following words: 'No delegate shall be eligible to any office named in the preceding section, except that of councilor'."

From reports of Reference Committee on Amendments to the Constitution and By-Laws of the 1938 meeting of the House of Delegates (published in THE JOURNAL, page 657, November, 1938):

Also, in order to conform to the Constitution and By-Laws of the American Medical Association, we recommend this change in Article IV, Section 5, of our Constitution, to read: "Who has attained the age of sixty-five years,"—this instead of seventy-five years as is now provided for.

From report of Reference Committee on Amendments to the Constitution and By-Laws, 1939 meeting of the House of Delegates (published in THE JOURNAL, page 666, November, 1939):

(1) That Article II of the Constitution of the Indiana State Medical Association be amended by striking out the words "to guard and foster the material interests of its members and".

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BOOKS

MEDICAL NURSING. By Edgar Hull, M.D., clinical professor of medicine, Louisiana State University School of Medicine; Christine Wright, R.N., B.S., instructor of nursing arts, Charity Hospital School of Nursing, New Orleans, (1939) and Ann B. Eyl, B.S., assistant dietitian, Cook County School of Nursing, Chicago. 168 illustrations including 11 color plates. 587 pages. Imitation leather binding. F. A. Davis Company, Philadelphia, 1940.

NEW AND NONOFFICIAL REMEDIES, 1940, containing descriptions of the articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on Jan. 1, 1940. Cloth. Price, postpaid, $1.50. Pp. 656-LXVIII. Chicago: American Medical Association, 1940.

Each year a revised list of the articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association as of January first is published in book form under the title of "New and Nonofficial Remedies." The book contains the descriptions of acceptable proprietary substances and their preparations, proprietary mixtures if they have originality or other important qualities, important nonproprietary nonofficial articles, simple pharmaceutical preparations, and other articles which require retention in the book.

A list of articles and brands accepted by the Council, but not described, is included in the book to cover simple preparations or mixtures of official articles (U.S.P. or N.F.) marketed under descriptive, nonproprietary names for which only established claims are made. Diagnostic reagents which are not used in or on the human body, and protein diagnostic preparations are not included in New and Nonofficial Remedies unless the determination of the status of these products by the Council has been requested by the distributor: If such products are found to be marketed in accordance with the Council's rules, they may be included in the list of undescribed, but acceptable articles.

New and Nonofficial Remedies is a practical and condensed text of pharmacology and therapeutics; it contains scientifically elaborated standards for all accepted nonofficial drugs; its Index to Distributors is a list of manufacturers, a large number of whose products have met the Council's high standards; its Bibliographical Index is a storehouse of references to reports which have been made mainly on unaccepted and unacceptable drugs; its prefatory material contains the Council's "Rules," a time-tested and reliable set of basic principles for the furtherance of scientific and rational medicine.

A supplement to the annual volume of New and Nonofficial Remedies is published twice a year to bring up to date such current revisions and additions as have been necessary since its last publication. Every product included in the book is subject to the official rules of the Council. The comments to rules are changed occasionally by way of clarifying interpretation to insure fair consideration of all submitted preparations as new standards are recognized. Such constant and critical consideration of its contents provides the physician with a valuable reference list of acceptable new preparations on which to base his selection for use in treatment according to the established current practices of the profession.

The 1940 New and Nonofficial Remedies, of course, contains the revisions which appeared in the supplements for the 1939 edition, and continues the plan of grouping together articles having similar composition or action under a general discussion. These discussions have undergone considerable revision in the 1940 edition. Further revision of statements regarding the actions, uses, dosage, composition, purity, identity, strength or physicial properties of many of the articles has also been necessary in some cases. Noteworthy revisions are those of the chapter on Liver and Stomach Preparations, radically rewritten and including a statement of requirements suggested by findings of the Anti-Anemia Preparations Advisory Board of the U. S. Pharmacopeia; the subsection Tuberculins, entirely rewritten to conform to newer knowledge in this field; and the chapter Allergenic Protein Preparations, the name of which has been changed to Allergenic Preparations. Minor but relatively important revisions are found in the articles: Bismuth Compounds, Serums and Vaccines, and Vitamins and Vitamin Preparations for Prophylactic and Therapeutic Use.

The indices of the new volume of New and Nonofficial Remedies are of the same order and plan as in previous editions. A general index lists accepted articles, including those not described. This is followed by an index to distributors in which appear all the Council accepted articles listed under their respective manufacturers. Finally, a bibliographical index is added for listing proprietary and unofficial articles not included in N.N.R. This includes references to the Council publications concerning each such article as has appeared in *The Journal of the A.M.A.*, Reports of the Council on Pharmacy and Chemistry, Propaganda for Reform, Vol. 1 and 2, or Reports of the A.M.A. Chemical Laboratory.

ANNUAL REPRINT OF THE REPORTS OF THE COUNCIL ON PHARMACY AND CHEMISTRY OF THE AMERICAL MEDICAL ASSOCIATION FOR 1939 with the Comments That Have appeared in THE JOURNAL. Cloth. Price, $1. Pp. 205, with 5 illustrations. Chicago: American Medical Association, 1940.

Only seven of the thirty-five reports listed in this annual collected report are of the familiar "Not Acceptable" or condemnatory type. Two reports announce omission of products from N.N.R., one being off the market. The remainder, far superior in bulk as well as in number, are concerned with educational and constructive considerations. This trend has been noticeable in recent years; it reflects the great predominance of the constructive over what may be called the destructive side of the Council's work of promoting rational therapeutics.

The educational reports touch three fields on which lie the front lines of present day therapeutics progress—chemotherapeutics, endocrines and vitamins. Two reports on sulfapyridine deal with the status and Council acceptance of commercial brands. The report on Neoprontosil recognizes that term as the Winthrop Chemical Company's proprietary name for 4-sulfonamide benzene-2-azo-1-hydroxy-7-acetylamino naphthalene-3:6-disodium sulfonate, and azosulfamide as the nonproprietary name for the same substance. The articles on Dilantin Sodium, Sobisminol Mass and Sobisminol Solution are status reports which accompanied the descriptions of accepted brands, a type of article increasingly used by the Council. Dilantin sodium is the new drug used in the treatment of epilepsy and has been accepted by the Council with carefully stated limitations for its use; sobisminol mass and sobisminol solution are new soluble bismuth preparations for use in the treatment of syphilis; they are noteworthy in that sobisminol mass has been shown to be effective when used orally. The reports on racéphedrine and nikethamide deal with nomenclature; these terms are recognized as nonproprietary names for racemic ephedrine (the sulfate and hydrochloride are also recognized) and pyridine-8-carboxylic acid diethylamide respectively; the latter was introduced into medicine under the proprietary name Coramine-Ciba and was the subject of a preliminary report by the Council in 1929 (*The Journal of the A.M.A.*, June 1, 1929, p. 1837).

The status report on questions concerning vitamins compiled by the Cooperative Committee on Vitamins of the Councils on Pharmacy and Chemistry and on Foods is becoming an almost annual event, awaited for the revisions of the "Allowable Claims" found acceptable for the various vitamins. This year's revisions are not extensive but the report is noteworthy for the reemphasis of the Council's stand on the subject of vitamins and vitamin mixtures. Alas, the Councils' is but one clear,

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authoritative voice of rationality in today's whirlwind of polyvitamin and polyvitamin-mineral absurdities foisted on the gullible public by astute and sophisticated advertising technic. The preliminary and supplementary reports by Snell and by Snell and Butt on the new principle for active hemorrhagic diathesis known as "vitamin K" are timely and noteworthy.

The leadership of the Council in matters of endocrine therapeutics and nomenclature is well sustained by such reports as Chorionic Gonadotropin, Assay Standards for Chorionic Gonadotropin, Stilbestrol and the Present Status of Testosterone Propionate: Three Brands, Perandren, Oreton and Neo-Hombreol Not Acceptable for N.N.R. No brand of any of these has been accepted and these reports are excellent justification of the Council's intelligent and well informed conservatism in this as in other matters.

Three "special" reports are worthy of mention. One is the warning report on the dosages of intra-urethral injection of solutions of local anesthetics, a reaffirmative strengthening of previous Council pronouncements. One is the Council statement Manganese in the Treatment of Dermatologic Disorders, which is buttressed by the conclusive and well documented paper of Dr. Maurice Sullivan, considered and sponsored by the Council. The third is the Study of the Promiscuous Use of the Barbiturates, Their Use in Suicides, a paper by Dr. W. E. Hambourger based on a review of medical literature and study of vital statistics. This study was authorized by the Board of Trustees of the A.M.A. and will be followed by other papers dealing with other aspects of the problem.

The present annual volume of Council reports is somewhat larger than usual and somewhat above the average issue in interest.

NAVY WANTS MEDICAL MEN

The Surgeon General of the Navy, Rear Admiral Ross T. McIntire, (MC), U.S.N., has announced that the Medical Corps of the Navy is being increased in strength proportionate with the expanding Navy and the Marine Corps. Examinations for appointments as commissioned officers in the Medical Department of the Navy will be held January 6th to 9th, 1941.

Rear Admiral McIntire also announced that appointments are being made in the Medical Corps, United States Naval Reserve, of male eitizens of the United States, graduates of class "A" medical schools, who are under 50 years of age and who meet the physical and professional requirements.

The examination to be held in January will be for appointment as Assistant Surgeon, in the Medical Corps of the regular Navy, effective approximately two months from date of examination, and for Acting Assistant Surgeon (Intern), effective July 1, 1941. Requests for authorization to appear for these examinations should be submitted to the Bureau of Medicine & Surgery, Navy Department, Washington, D. C., in sufficient time to permit the authorization to reach the applicant prior to December 30, 1940.

Applicants for appointments as Assistant Surgeon must be citizens of the United States between the ages of 21 and 31, graduates of Class "A" medical schools and have completed one year of intern training in a hospital accredited for intern training by the Council on Medical Education and Hospitals of the American Medical Association.

Applicants for appointment as Acting Assistant Surgeon (Intern) are not required to submit evidence of previous intern training, and are appointed for a period of eighteen months, during which time they serve as interns in the larger naval hospitals which are approved for intern training. After completion of one year of service Acting Assistant Surgeons are eligible for examination for appointment as Assistant Surgeons. Acting Assistant Surgeons and Assistant Surgeons receive the pay and allowances of a Lieutenant (junior grade).

The Medical Corps of the Navy is being increased in strength proportionate with the expanding Navy and the U. S. Marine Corps. Service for medical officers is active professionally and attractive in the shore duty, sea, and foreign shore station assignments. In the normal rotation of assignments every practicable consideration is given the officer's preference for the type of duty he desires. The Naval Medical School at the Naval Medical Center, Washington, D. C., offers a course of post-graduate instruction and instruction in those branches of medicine which apply particularly to the Naval Service. Under normal conditions newly appointed medical officers are assigned to this course upon entry into the service or during their first few years of naval service.

Naval medical officers are encouraged to develop a specialty after they have completed their first cruise at sea. Shortly before completion of his sea duty, the Navy doctor may request special training in the Medical Department specialty in which he is interested. Such requests are acted upon by a special board in the Bureau of Medicine and Surgery and, if approved, the Navy doctor is sent to a hospital for training and experience in that specialty for one year. Upon completion of this training, he is assigned to post-graduate instruction at one of the many medical centers in the United States for a period up to one year after which, in so far as is practicable, he is retained in that type of duty. Some of the specialties in which qualifications may be obtained are: Surgery; Medicine; Otolaryngology; X-ray; Laboratory; Pathology; Public Health; Psychiatry; Deep Sea Diving; Aviation Medicine (Flight Surgery); Gas Warfare; and Tropical Medicine. Several officers have been trained in research particularly applying to problems arising in submarine and aviation activities.

The service affords excellent opportunities for professional advancement. Medical officers receive the same pay and allowances as other officers of the Navy in corresponding ranks and the equivalent amount of service.

A circular of information for applicants for appointment as medical officers of the Navy, containing full information regarding physical requirements, professional examinations, rates of pay, and promotion and retirement data may be obtained by addressing the Bureau of Medicine and Surgery, Navy Department, Washington, D. C.

Applicants for appointment in the Medical Corps of the United States Naval Reserve should be addressed to the Commandant of the Ninth Naval District, Great Lakes, Illinois, who will upon request furnish complete information regarding vacancies in ranks, etc., of officers of the Medical Corps, United States Naval Reserve in the district.

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ABSTRACT

MODERN WARFARE WILL INCREASE INCIDENCE OF 'SOLDIER'S HEART'

A. M. A. Journal Says Adequate Examination Should Make Possible Early Treatment or Preventive Measures of Disorder

Adequate examination should make possible the institution of preventive or early treatment measures for neurocirculatory asthenia or "soldier's heart," one of the most frequent causes of invalidism among soldiers, *The Journal of the American Medical Association* for Aug. 17 declares in an editorial which points out that modern warfare will also made the condition widespread among civilians.

The condition is a syndrome or set of symptoms occurring together. It is characterized, *The Journal* points out, "by labored breathing, fatigue and exhaustion, palpitation or heart consciousness, fainting, giddiness, sweating, blueness or mottled coloring of the hands and a variety of neurovascular (nerve and blood vessel) phenomena. The pulse at rest and in sleep is normal but is easily accelerated by emotion or exercise and is abnormally slow in its return to normal after exercise. Blood pressure is as a rule normal at rest but exhibits the same exaggerated response to exercise and emotion as does the pulse. The electrocardiogram (graphic tracings of the electric current produced by the contraction of the heart muscle) does not reveal any structural changes. The symptom phosphaturia (high percentage of phosphates in the urine), so commonly observed in neurotic patients, is common especially after light exercise."

The editorial says:

"The appearance of the second edition of Sir Thomas Lewis's 'The Soldier's Heart and the Effort Syndrome' focuses the attention of physicians once more on one of the most frequent causes of invalidism among soldiers. 'Soldier's heart,' 'the irritable heart of soldiers,' 'disturbed action of the heart,' 'effort syndrome' and 'neurocirculatory asthenia' is not a disease. It is rather a complex of characteristic neurovascular symptoms, which occur with sufficient regularity to justify grouping into a definite syndrome. This condition is not an organic disease of the heart or a clinical entity with definite pathologic (disease) appearances. Neither is it peculiar to war conditions. Modern warfare with all its horrors, the physical and emotional strain and the constant fear of death which it invokes is bound to reap a rich harvest of victims of neurocirculatory asthenia. The extension of the horrors of war to the civilian population multiplies the cases beyond measure. In the war of 1914-1918, Sir Thomas Lewis states, for every four wounded there was one cardiovascular (heart and blood vessel) case in the British Expeditionary Force. Seventy thousand had reported sick and were classed as cardiovascular by the summer of 1918, and 44,000 soldiers with effort syndrome (neurocirculatory asthenia) became pensioners. Actually no more than one out of six of these soldiers suffered from disease of the heart. The rest represented cases of 'effort syndrome.'

"To differentiate the condition from organic disease of the heart," the editorial continues, "the English classified these cases as 'disturbed action of the heart (D.A.H.).' The effect of suggesting 'something wrong with the heart' in a condition of undoubted neurogenic (originating in the nervous system) character had anything but a salutary effect on the patients. For this reason, and because the symptoms resembled those of fatigue following effort in normal persons, Lewis gave it the name 'effort syndrome.' The name 'neurocirculatory asthenia' was suggested by a team of medical reserve corps officers of the American army sent to Colchester, England, to study the condition with Sir Thomas Lewis. They felt that the symptoms comprising effort syndrome in normal persons are not exactly the same as those observed in neurocirculatory asthenia.

"While the basic mechanism of neurocirculatory asthenia has not been elucidated, the tendency of students of the syndrome is to regard it as psychogenic (originating in the mind)—a functional disorder of the autonomic (involuntary) nervous system. Given a neuropathic (nervous disorder) predisposition based on hereditary and constitutional inadequacy, many factors can assume the role of exciting or initiating agents. Among these, infectious or physical agents and the psychic (mental) strain of war are most important.

"The diagnosis of the syndrome presents few difficulties. Its differentiation from organic disease of the heart, however, calls for special training and experience in cardiology (study of the heart and its functions). The diagnostic problem likewise involves the recognition of possible associated disease such as pulmonary tuberculosis, exophthalmic goiter or malaria. The electrocardiogram, the roentgenogram (x-ray film) and previous training and experience in cardiology should eliminate most of the earlier errors.

"Undoubtedly the most important phase in the treatment of this condition is prevention. Prophylaxis should properly begin at the time of enlistment and in the training camps. The faulty examinations in the last war are clearly illustrated, as pointed out by Lewis, by the fact that nearly half the patients invalided for effort syndrome or heart disease developed the symptims before joining the forces and more than half developed them before their training was complete. 'There is not the slightest doubt,' states Lewis, 'that adequate examination would have eliminated most of these men, would have kept them in useful employment, would have spared them much suffering, would have saved hospital space and large funds of the Ministry of Pensions. Such cases were six or seven months in training, five months in hospital, and gave in return 2.2 months of full and 1.5 to two months light duty.' Experience in the last war demonstrated that the prognosis (outcome) on the whole was more favorable when treatment was instituted early. Prolonged rest in bed and digitalis had little if any effect on the course of the ailment. A correct psychologic approach to a condition with a pronounced mental aspect is essential to success. The patient above all must be reassured that he is not suffering from heart disease. The treatment of infections and of foci of infections is important. The regimen of graded exercises, as developed by Lewis, has been preeminently successful in restoring most of these patients to a more or less normal state. It has been useful both for sorting patients as to their reaction to exercise and in curing their symptoms. After a short rest in bed this regimen is initiated by short drills outdoors supplemented by hikes and games. The average stay at the hospital under this plan has been shortened from an average of 5.3 months to five or six weeks."

COMMERCIAL ANNOUNCEMENT

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WORLD AFFAIRS AND MEDICINE*

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Those of you who have read the reports of the various committees as they appeared in the October issue of THE JOURNAL will realize the amount of work done by the state organization in the past year. To those of you who have not read the reports I would recommend their careful perusal. I shall, therefore, limit my remarks to a few issues that I believe to be uppermost in the minds of all of us.

The importance of world events and their rapid enactment might seem to dwarf problems which we formerly thought were of great significance and tend to discourage any long range planning. However, it seems to me all the more important that American Medicine should continue along its regular course, meeting every problem as it arises and attempting its proper solution to the end that the health of the population both civilian and military may be best conserved.

"Coming events cast their shadow." Little did most of us think that the seizure of Manchuria by Japan over the protests of France and the United States would be the beginning of the most terrible orgy of unwarranted aggression by the dictator powers in all history. Comparatively little apprehension was caused by the Italian invasion of Ethiopia, the re-arming of the Ruhr, or the annexation of Austria. The ruling powers in Britain felt a sense of security in the presence of a stronger Germany between Soviet Russia and Socialistic France. Political instability and faith in the Maginot Line lulled France to sleep. The appeasement of Munich served to alienate Russia and the Balkans from the Allies. Despite promises to the contrary, Hitler marched steadily on in his nefarious despoilations. The dismemberment of Czecho-Slovakia and the crushing of Poland revealed to the world the true nature of his intentions. Few of us believed that Denmark, Norway, the Netherlands, and Belgium could be crushed with so little apparent effort. Still more astounding was the rapid subjugation of France with her Maginot Line and what was believed to be the finest army in existence. The courageous defense exhibited by England has astounded the world and serves to demonstrate the will of a free people to preserve its liberties. At the time that this is written, however, the Axis thrust to the East has begun in the Balkans, and the fate of the British lifeline to the Far East may be decided soon. Should such a thrust be successful, it might be possible that England could not withstand such terrific odds. The action of the Axis in including Japan is meant as a direct threat to the peace of the United States, and, if England falls, the results might be immediately disastrous to our own security.

The only restraint recognized by the dictators is force, so that a strong national defense is now universally known to be an immediate necessity.

Anticipating this, the House of Delegates of the Indiana State Medical Association at the Fort Wayne session a year ago adopted a resolution offering the full support of the medical profession of this state to the government's armed forces, and an M-Day Committee was appointed. At the New York meeting of the American Medical Association, the House of Delegates in executive session commended the action of the Indiana State Medical Association and further offered a series of resolutions in which it extended to the government all the facilities of the American Medical Association including the records and personnel of the Chicago office. It also offered a voluntary abridgement of some of the personal rights of the individual physician for the duration of the crisis. Finally, it set up a committee on Medical Preparedness to cooperate with the Advisory Commission on

* President's Address presented before the first General Meeting of the 91st annual session of the Indiana State Medical Association at French Lick, October 30, 1940.

National Defense, the Army, and the Navy Medical Corps, the United States Public Health Service, and all other federal agencies in preparing our nation medically to meet any emergency.

How well our M-Day Committee has cooperated with the National Committee can be judged by its accomplished acts. A complete list of examining physicians for all the Selective Service Boards together with a list for the advisory boards of all the Congressional districts has been submitted and approved without exception by both the State and Federal Governments. These selections have been made by the district councilors and the county presidents with the assistance of the M-Day Committee of the component local societies. Statistical data of medical resources of our State have been carefully tabulated. This has involved a stupendous amount of work by the personnel of this committee and the secretary's office. It has been the purpose of the state organization to prevent a bottle neck to defense by lack of medical preparedness, to see that medical men are assigned to duties they are most qualified to perform, and to secure the least possible dislocation of medical service for the civilian population.

Immediate attention to urgent problems of defense is uppermost now but, by long range perspective, this is not enough. Our memories afford solemn reflections of the vast social and economic dislocation following in the wake of World War No. 1. We have no valid reason to doubt that even more serious upheavals may follow the present world chaos.

Obscure but powerful social and economic forces brought unemployment with resulting indigent and low income groups, while advances in medical science resulted in increased medical costs. Our casual attention to these discrepancies in earlier years has given way to intensive studies by our students of medical economics not only in an effort to forestall governmental tendencies to socialize medicine, but to arrive at an intelligent solution of such problems. The panel system in England marked the creation of a new medical order that came upon a somnolent profession. Shall we procrastinate and abide by *laissez-faire* methods, or shall we intensify our studies of the problem?

Most of us believe that all such problems have their local complexities and should be met by a militant, vigorous local profession. In this state, if governmental agencies were to furnish the indigent with other assistance comparable to the medical care available, each family would have a well-furnished bungalow, with perhaps a radio, an automobile, and an evening gown for the lady of the house. However, we must admit that families in the low income group incurring catastrophic illness are faced with a very serious problem. I would strongly urge that the recommendations of our Permanent Study Committee on Health Insurance, that legislation, properly safe-guarded, making possible plans for both non-profit group hospitalization and group medical care be introduced in the next legislature.

I must commend the Committee on Medical Relief on its success in creating a better understanding between the profession and the Township Trustees' Association and the social security group. I would be remiss not to call particular attention to the splendid work done by the Woman's Auxiliary, for Mrs. William Tinney and her official family deserve the highest praise.

I wish to thank sincerely all of the members of the various committees for their splendid cooperation and to express my appreciation for the efficient service rendered by Mr. Hendricks and his office staff.

I find it difficult to express adequately my gratitude for the high honor conferred upon me. I shall leave the office in the supreme confidence that the medical profession of Indiana always will be equal to any responsibility placed upon it.

BECAUSE THE FRENCH LICK SESSION IS IN PROGRESS
WHILE THIS ISSUE IS ON THE PRESS,
REPORTS OF MEETINGS AND CONVENTION NOTES WILL BE
PUBLISHED IN THE DECEMBER ISSUE.

THE DECEMBER JOURNAL WILL CONTAIN ALSO THE YEAR'S INDEX AND THE 1940 MEMBERSHIP ROSTER OF THE INDIANA STATE MEDICAL ASSOCIATION.

ACUTE NEPHRITIS*

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Acute glomerulonephritis is a sequella of certain infectious diseases, characterized by hypertension, edema, and hematuria, and progresses into chronic nephritis in a significant percentage of patients.

The majority of cases of acute glomerulonephritis follow hemolytic streptococcic infections of the upper respiratory tract. Tonsillitis, sore throat, sinusitis, or otitis media had preceded the acute nephritis in more than 60% of 976 collected cases. Contrary to the older belief, scarlet fever is not a particularly common preceding infection, accounting for only 6% of this series. Typical attacks of acute glomerulonephritis may follow streptococcic skin infections such as impetigo and ecthyma, pneumococcic pneumonia, and occasionally rheumatic fever.

The frequency with which acute nephritis follows any of these infections, however, is low. Keyser-Peterson and Schwab[1] found only 10 cases of acute nephritis in 479 cases of angina, while DeWesselow, Goadby, and Derry[2] found only 3 in 354 cases of tonsillitis, and the incidence following scarlet fever varies from 1.3% to 5% in recent series. The incidence of pneumococcic pneumonia preceding nephritis differs considerably in different reports. Seegal[3] found 7 instances of acute nephritis in 1,004 cases of pneumonia, while Goldring and Wyckoff[4] described two patients who developed typical glomerulonephritis with hematuria, edema, and elevated blood pressure among 44 cases of lobar pneumonia whose kidney function had been carefully followed. In these two cases, symptoms developed 12 and 13 days after the crisis. The relation of acute nephritis to rheumatic fever is uncertain. Baehr and Schifrin[5] found only one case which they were completely willing to accept among 235 autopsied cases of rheumatic fever dying in the acute stage of the disease, while Salvesen[6] reports acute nephritis in 4.7% of his cases of rheumatic fever. The common microscopic hematuria in rheumatic fever is probably an expression of the hemorrhagic tendency of the disease rather than of glomerular inflammation. The urinary changes must be accompanied by edema or hypertension before a diagnosis of acute glomerulonephritis is justified.

How does a streptococcal infection of the tonsils, or a sore throat, often slight and apparently insignificant, result in acute glomerulonephritis? What is the mechanism of the connection between these acute infections and the renal lesion which appears one to three weeks later, when the patient has been afebrile for some time and is seemingly completing his convalescence or has returned to work? Satisfactory answers to these questions cannot be given, but clinical and experimental investigations of recent years permit the construction of at least a working hypothesis.

Direct bacterial invasion of the kidney from the primary focus by way of the blood stream is highly improbable. The blood and urine are almost always sterile in patients with glomerulonephritis. It is very rare in puerperal and other forms of sepsis, despite the fact that here the blood teems with highly virulent organisms and that the urine may contain large numbers of bacteria. The forms of renal disease present in such cases are abscesses, pyelonephritis, or focal nephritis.

It would, therefore, seem that glomerulonephritis is not due to the actual invasion of the kidneys by micro-organisms, but must be the result of injury by some toxic substance. The diffuse nature of the glomerular injury and the evidence that the glomerular lesions are but one manifestation of widespread capillary damage also speak in favor of the toxic nature of the process. Moreover, Trask and Blake[7] have demonstrated the presence of the toxin of the scarlatinal streptococcus in the urine of patients with scarlet fever, and Longcope and his co-workers have found that streptococci from infectious foci in patients with glomerulonephritis produce toxic filtrates which are often of considerable potency. But direct injury of glomerular capillaries by circulating toxins is hardly a satisfactory explanation. Acute glomerulonephritis does not develop at the height of the disease, when fever and other symptoms, and presumably the concentration of circulating toxins, are at their height, but only after a latent period of a week or more.

Following the first studies on serum sickness, Schick pointed out the analogy between the course of events in this condition and in postscarlatinal nephritis, and suggested that the renal lesion depends on the development of a hypersensitive state in the process of immunization. Clinical manifestations much akin to those of glomerulonephritis are not uncommon in serum sickness and urticaria, including edema, diminished volume of urine, albuminuria, and decrease in kidney function. The concentration of antibodies, particularly of anti-

* Presented before the General Meeting, Indiana State Medical Association, French Lick, October 31, 1940.

[1] Keyser-Peterson, J. E., and Schwab, E. *München, med. Wchnschr.* **69**:580:1922.

[2] DeWesselow, O. L. V. S., Goadby, H. K., and Derry, D. C. L. *Brit. Med. Jour.* **1**:1065:1935.

[3] Seegal, D. *Arch. Int. Med.* **56**:912:1935.

[4] Goldring, W., and Wyckoff, J. *J. Clin. Invest.* **10**:355:1931.

[5] Baehr, G., and Schifrin, A. Libman Ann. Vols. 1:125:1932.

[6] Salvesen, H. A. *Act. med Scand.* **96**:304:1938.

[7] Trask, J. D., Jr., and Blake, F. G. *J. Exper. Med.* **40**:381:1924.

streptolysin, has been found to be higher in the blood of patients with nephritis than in the blood of patients with the same diseases who did not develop nephritis.

Within the past few years, Masugi[8] has produced experimentally what is probably the closest simulation of human glomerulonephritis yet achieved. Masugi found that when he injected saline suspensions of rat kidney into rabbits the rabbits developed specific antirat-kidney antibodies. When he then injected serum from one of these rabbits into a rat, the rat developed albuminuria, hematuria, hypertension, renal insufficiency, and a pathological picture closely resembling human glomerulonephritis.

Schwentker and Comploier[9] have gone a step further. They found that when rabbits were given injections of emulsions of rabbit kidney, no antibodies were produced, but that if streptococcus toxin or staphylococcus toxin was given at the same time, complement-fixing antibodies developed, one of which was specific for kidney tissue.

The importance of these experiments lies in the demonstration that antibodies can be produced which damage the kidney in a fashion that is at least closely related to glomerulonephritis, and the harmony of this observation with the conception that sensitization to bacterial infection and the mechanisms concerned in the development of immunity are in some obscure way concerned in the pathogenesis of human glomerulonephritis.

In recent years, too, the view has steadily gained ground that the glomerular capillaries are not the only ones damaged in glomerulonephritis, albeit they are the most severely injured. The sudden onset of edema, at times preceding the albuminuria, its widespread distribution, and the high protein content of the edema fluid speak for widespread capillary damage. Likewise, the cardiac dilatation and changes in the electrocardiogram are best explained on this basis.

The cardinal symptoms of acute glomerulonephritis are the urinary abnormalities, edema, and hypertension. But as Murphy and Rastetter[10] point out, if the presence of all three is required for a diagnosis many mild cases will be overlooked and not until years later when chronic nephritis is obvious will the significance of the mild early episode be apparent. In a series of 76 cases of acute nephritis studied in the Lakeside Hospital, hematuria was present in all, hypertension in 70%, and demonstrable edema in 59%.

The urinary syndrome is the most important because it is not only the most constant but is usually essential for the diagnosis. Early in the disease the urine volume is reduced, the specific gravity high, and the urine contains albumin, blood, and casts, especially the characteristic red cell cast. The amount of protein lost in the urine is usually only one to two grams a day, but may be as much as fifteen. Often there are wide fluctuations in the amount of albumin excreted from day to day. The amount of proteinuria does not bear any relation to the severity of the attack nor to the outcome, for Bell[11] has shown those glomeruli most severely affected have closed capillaries and hence do not transmit albumin. The degree of hematuria also varies: about half our patients had grossly bloody or smoky urine; in the remainder it was apparent only on microscopic examination.

The urine volume in acute nephritis is usually said to be reduced and the specific gravity high. This is in keeping with the pathologic picture of swollen, ischemic glomeruli, and relatively intact tubule cells. There is a reduced renal blood flow, diminished volume of glomerular filtrate, but efficient tubular concentrating power. However, many of our patients showed specific gravities below 1.020 on admission. This raised the question among the house staff and students whether the patient did not have an exacerbation of a chronic rather than an acute nephritis. Of 37 cases in which the initial specific gravity was below 1.020, 22 were obviously losing edema at the time of admission as evidenced by a large urine volume and loss of weight. Five others were very mild cases and had had a large intake of fluids. The remaining 10 are of particular interest. The 24-hour urine volume ranged from 220 to 800 cc., averaging 340 cc. The specific gravity in one was 1.017, in the other 1.012 to 1.014. A small volume of dilute urine betokens impairment of tubular function, and therefore indicates a more extensive renal damage than is usually present in acute nephritis. This was borne out in these cases: of the 10, 2 died in the hospital, 4 have gone on to chronic nephritis, and only 4 have recovered.

Nor does the height of the blood pressure, which is elevated in over two-thirds of the cases of acute nephritis, bear any reation to the severity of the attack or to the outcome. Pressures of 210/150 may drop to normal in a couple of weeks, while hypertension may be absent throughout the acute attack, and yet the patient go on to the development of chronic nephritis. As a rule the elevation in blood pressure is moderate, systolic pressure being between 140 and 170 with the diastolic pressure increased proportionately. Occasionally the diastolic rise is greater. While in many cases the arterial tension is consistently elevated, in others it fluctuates greatly, with the pressure usually higher toward evening. The elevation in blood pressure may precede the development of edema and hematuria, or may come on gradually after these are well established. Persistent hypertension represents an unhealed renal lesion, and a rising blood pressure, even if other signs of acute nephritis have disappeared, is an unfavorable omen.

The mechanism of the hypertension is not clear.

[8] Masugi, M. Beitr. path. Anat. u. allg. Path. **91**:82: 1933.

[9] Schwentker, F. F., and Comploier, F. C. *J. Exper. Med.* **70**:223:1939.

[10] Murphy, F. D., and Rastetter, J. W. *J.A.M.A.* **111**: 668:1938.

[11] Bell, E. T. *Amer. J. Path.* **12**:801:1936.

Volhard[12] attributed it to arteriolar spasm, which he believed took place not only in the renal vessels but throughout the arterioles of the body. Pickering[13] believes that the hypertension in acute nephritis is produced by a different mechanism from that in chronic nephritis and essential hypertension, and that it is the result of arteriolar contraction from increased nervous tone. This view is not shared by others. Due to the work of Goldblatt[14] another hypothesis may be suggested. Goldblatt has shown that renal ischemia produced by partial constriction of the renal artery leads to persistent hypertension, which falls to normal again on removal of the clamp. Now in acute glomerulonephritis, swelling of the capillary endothelium with narrowing of the glomerular capillaries can be seen in histologic sections, and perfusion experiments show a reduction in the patency of the vessels. So it seems quite reasonable to believe that in acute nephritis there is a reduction in renal blood flow and consequently the liberation of some substance from the ischemic kidneys into the blood stream which by some humoral mechanism leads to constriction of the arterioles through the body. Thus the hypertension may quite possibly be similar to that which Goldblatt has produced in dogs by maintained constriction of the renal arteries.

Recognizable edema was recorded in 59% of our cases. As is commonly taught, it was most frequently noted in the face, next about the ankles. It may be the first symptom, appearing suddenly before there are any urinary abnormalities. It is apt to be more conspicious in the morning, in contrast to cardiac edema which develops during the day. When present in the loose tissue about the eyelids, it is apt to impart a bloated appearance and whitish pallor, the characteristic "nephritic facies" which often permits the diagnosis of renal disease to be made at a glance. It must be pointed out that the criteria for edema on physical examination are very crude, and that a patient may have considerable edema before this impresses the examiner. Thirty-seven of our patients were weighed on admission and at frequent intervals: 6 of these lost 1.5 to 7.5 Kg., average 3.7 Kg., with the onset of diuresis, and yet no edema had been recognized on physical examination. The average weight loss in those with recognized edema was 7.1 Kg.

Pleural and pericardial effusions and ascites are more common in children than in adults. Pulmonary rales, unassociated with obvious pulmonary infection, were present in 23% of our patients and pleural effusion in 9%. The protein content of edema fluid and transudates in acute nephritis is higher than that in cardiac edema or the edema associated with low plasma proteins. Edema in acute nephritis is not due to loss of protein in the urine, for it may appear before any albuminuria, and even when it does not the plasma proteins are found to be normal in the vast majority of cases. Nor is it due primarily to the inability of the kidney to eliminate salt or nitrogen or water. The frequent sudden onset of the edema, its wide distribution and high protein content, with the lack of abnormality in the protein or electrolyte composition of the blood, indicate that it is best explained on the basis of widespread injury to the capillaries throughout the body, presumably through the same mechanism which has injured the glomerular capillaries.

TABLE I
PROGNOSIS IN ACUTE NEPHRITIS

Authors	*No. of Cases*	*Died of Acute Nephritis* %	*No. Followed*	*Cured* %	*Latent* %	*Chronic* %
Murphy and Rastetter [10]	150	8	127	58		42
McPhee and Kaye [18]	90	6	48	85		15
Richter [19]	100	5	77	81		19
Longcope [16]	141	5	134	43	32	25
Falkers [20]	68	9	41	56		44
Leavell et al [21]	82	?	26	77	19	4
Hayman and Martin [22]	77	9	52	67	17	16

Further evidence of the generalized tissue damage in acute glomerulonephritis is found in the high incidence of cardiac involvement. At first regarded as a rarity, the incidence of demonstrable cardiac dilatation has risen with the more careful studies of recent years. Whitehall, Longcope, and Williams[15] found x-ray evidence of cardiac dilatation in 17% of mild cases and in 90% of severe cases of acute nephritis. In the severer cases there is dyspnea, orthopnea, elevated venous pressure, and the condition may readily be mistaken for acute heart failure. This enlargement is not due to the hypertension, for there is no correlation between the degree of elevation in blood pressure and cardiac dilatation, and it may persist after edema has disappeared and after the blood pressure has returned to normal. Nor is the enlargement due to pericardial effusion, although this may contribute to it in some cases. Moreover, many cases of acute nephritis show changes in the electrocardiogram, most readily detected in serial records. The common findings are abnormalities of the T wave, low amplitude, and prolongation of auriculoventricular conduction, changes which are indicative of myocardial damage rather than mechanical factors or pericardial effusion.

Slight nitrogen retention is common in acute nephritis with some reduction in kidney function as measured by the urea clearance test or phenolsulphonphthalein excretion. The symptoms of uremia, with marked nitrogen retention, develop in about 10% of cases. Uremia may develop when oliguria is extreme, so that even with a high specific gravity and high concentration of substances in the urine, the volume is too small to con-

[12] Volhard, F. Bergman and Staehelin Handbuch der innere Medicin, Berlin, Julius Springer, 1931, Vol. 6, Part II.

[13] Pickering, G. W. *Clin. Science* **2**:363:1936.

[14] Goldblatt, H., Lynch, J., Hanzal, R. F., and Summerville, W. W. Jr. *J. Exper. Med.* **59**:347:1934.

[15] Whitehall M. R., Longcope, W. T., and Williams, R. *Bull. Johns Hopkins Hosp.* **6**:83:1939.

tain the quantity of solids to be eliminated daily, and also in that group of patients mentioned previously who excrete a *relatively* small volume of dilute urine. Here, of course, a much larger volume is necessary to eliminate the same quantity of waste.

The mortality from acute glomerulonephritis during the initial attack varies from 5 to 10 per cent in different reports. Of the 7 deaths from acute nephritis in our series, 4 died in uremia with marked nitrogen retention, 1 of acute cardiac failure with pulmonary edema, 1 immediately after a generalized convulsion, and 1 eight hours after admission of uncertain cause. The immediate mortality and the status of those patients whom it has been possible to follow in our series, together with the data from several similar studies from the literature, are shown in Table I.

The figures differ considerably in different reports—cures ranging from 42.5% in Longcope's[16] carefully studied series to as high as 80%. In our group, we have counted as well those who are free from symptoms, and had normal blood pressure, no abnormal albuminuria or hematuria, and normal kidney function. All of those whom we have been able to follow who left the hospital apparently well have remained so. All the others who are classed as cured have shown normal urine and blood pressure within one year of the acute attack, the majority within six months. Addis[17] says healing occurs in the first year in 75% of those who recover and that there is no record of healing after five years. In the latent group are those who have no symptoms and a normal urine, but a persistent systolic blood pressure above 140 mm. Hg., and those with a normal blood pressure but persistent albuminuria or hematuria. When both elevated blood pressure and abnormal urine were present, the patients have been classified as chronic nephritis.

Since something like 20% of cases of acute nephritis progress to chronic glomerular nephritis, an incurable disease, it behooves us to make every effort to bring about healing in the initial attack. Once a patient has completely recovered from acute nephritis he is no more likely to have subsequent attacks than if he had never had kidney disease. Longcope has shown that the patients who recover are those who rid themselves of the causative infection, usually hemolytic streptococci. Those who continue to harbor streptococci in the upper respiratory tract are prone to repeated exacerbations of the renal lesion, and to the development of chronic nephritis.

In the majority of cases acute nephritis clears with simple rest in bed and treatment of the primary disease. In those which do not, prolonged rest is of the utmost value. The importance of rest is recognized in the treatment of tuberculosis and rheumatic fever. In these conditions six months' or a year's rest is accepted without question if it is indicated. Yet we are too prone to allow our acute nephritics to return to work with hematuria or elevated blood pressure. Every effort should be made to remove definitely diseased tonsils, or to drain definitely infected sinuses, but wholesale or thoughtless surgery accomplishes nothing. We have seen no benefit from sulfanilamide, although it is used routinely in some clinics.

At the onset of acute nephritis it is well to restrict both diet and fluid, particularly if nausea is present. Diuretics are of no avail. Oliguria is due to swelling of the endothelium of the glomerular capillaries with diminished blood flow. No drug will shrink these endothelial cells. If an increase in water intake is not followed by an augmented urine volume, no other diuretic will be effective. In the absence of nausea or nitrogen retention, there is no need for protein restriction. Albuminuria is not a reason for prohibiting meat. In fact, if it is massive or prolonged, a full protein diet should be given in an effort to make up for that lost in the urine. It is usually possible to have the patient back on a full diet by the end of 10 days or two weeks. In the presence of edema, salt should be restricted by avoiding salted foods and using none in cooking.

[16] Longcope, T. W. *Internat. Clinics.* **1**:1:1938.
[17] Addis, T. H. *Bull. Johns Hopkins Hosp.* **49**:203:1931.
[18] McPhee, I. M., and Kaye, G. *M. J. Australia.* **2**:14:1932.
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FIFTEEN "NIGHT CRAMPS" CASES RELIEVED BY QUININE SULFATE, DOCTORS SAY

"Night cramps" were relieved in fifteen patients by means of quinine sulfate, Harold K. Moss, M.D., and Louis G. Herrmann, M.D., Cincinnati, report in *The Journal of the American Medical Association* for October 19.

The condition, which consists of painful spasms of muscles in the extremities, generally occurs in middle aged and elderly persons while they are at rest. On the basis of successful reports in the literature of the use of quinine in certain rare muscular diseases, the authors tried quinine sulfate for this more common condition. A beneficial effect was noted in all cases, complete cessation of pain being obtained sometimes within a few hours.

Many patients continued without symptoms when the drug was discontinued or a placebo was substituted, unknown to them. Others, however, showed repeated increase of symptoms on placebo treatment and remission when medication was resumed. Further investigation as to the mechanism of action of the drug is being pursued, the authors report.

EVOLUTION AND REVOLUTION IN MEDICAL PRACTICE

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During the course of the past decade we have witnessed a remarkable evolution in the practice of medicine. To keep reasonably informed about the activities and accomplishments of our profession and in step with its march of progress would be to view a record of achievements unsurpassed by any other group of workers in the world, not excepting even the marvelous strides made in the field of the physical sciences. This short span has been productive of greatly elevated standards of medical education, to the extent that our facilities for effective teaching and training surpasses that of any in the world, even those existent before the present war. Along with this we have seen the development, in most of our colleges, of well established and organized health departments charged with the physical welfare of their students. In addition the growth of free clinics and dispensaries, organized in the beginning to provide care for the needy and teaching material for students, has been augmented by large state-operated hospitals and clinics, providing medical care for citizens with little consideration as to their actual indigency or economic dependency. The practice of obstetrics and maternal and infant welfare has undergone tremendous changes, and in step with these developments we find an immense number of agencies concerned in the social aspects of obstetrics and pediatrics.

Life expectancy now is estimated at sixty-two years. No one can doubt that this prolongation of life has been brought about through the accomplishments of medical science in reducing the hazards of infancy through nutritional advances, immunization against various diseases, the advances of preventive medicine and the development of more accurate and effective measures for diagnostic and therapeutic methods in caring for the sick. But this achievement has been largely responsible for the problem of social security since there are more people today over 55 years of age than there are 10 years of age and 97% of those over sixty-five are economically dependent.

Industrial medicine has made rapid strides in limiting the hazards peculiar to workers and in reducing lost time accidents and illnesses through periodic physical examinations and preventive measures. Not many years ago the average worker lost 28 days a year from work because of illness. Today the loss is less than 8 days per year, the lowest rate of any nation in the world. Yet this reduction has resulted in an unemployment problem because the workers formerly necessary for replacements are no longer required. This in turn has brought about much of the social reforms, passed or agitated, relative to wages, hours, unemployment benefits and medical care plans.

Preventive and therapeutic medicine has achieved tremendous advances in the care of the physically disabled, the blind and the deaf, the cardiac cripple, the cancer victim, the pneumonia hazard, the communicable disease problem, the venereal and many more. And yet out of this progress has evolved more and more agitation for social security measures to provide aid and benefits to those afflicted, and at the same time abolish the incentive that has effected these improvements by socializing the practice of medicine. Every year medical science has been adding new and improved methods for the treatment of disease. Diabetes, pernicious anemia, yellow fever, nutritional disorders, streptococcus infections, pneumonia, meningitis, gonorrhea, typhoid fever and a host of others have fallen before the discoveries in the fields of endocrines, vitamins, biologicals and chemotherapies. And this rapid growth has in turn caused the people generally, and social workers particularly, to demand ways and means for supplying these advantages to all, and the result has been the socialistic trend of legislation to accommodate them.

It has long been a notorious indictment of the medical profession that they are poor business men. Their names have graced the myriad "sucker" lists throughout the country, and their desire to secure some portion of financial independence has made them easy prey for all the fly-by-night, carpet-bagging schemes that wily promoters could pull out of their bag of tricks. The reason for this is not hard to fathom. Most physicians are too busy caring for their patients to devote the time and study necessary for careful investments. Moreover they have been so lenient in their dealings with patients that they have acquired an expectancy of honesty in all people and consequently are easy victims when confronted by clever confidence operators. The very fact that through the years people have acquired the habit of taking advantage of the physician in the payment of their bills for services, and have banked on the proverbial easy going nature of the doctor to wait for his payment, has built up a peculiar reaction. Instead of recognizing this gratefully as a privilege, which should not be abused, they have come to regard all physician's bills as excessive, and, in too many instances, not to be paid at all. They have become firm supporters of current legislation for more and more benefits for less and less individual effort. And thus we see the traditional sympathetic service of the physician bartered for a mess of socialized, bureaucratic methods of caring for the sick.

In order to see clearly the evolutionary trend to which the practice of medicine has been subjected, it is not necessary to revert back to 1883 when the

first compulsory health insurance law was enforced by Bismarck, nor to 1912 when politically ambitious Lloyd George succeeded in the adoption of his compulsory health insurance plan and the dole, making medicine a puppet of the state. Neither is it necessary to review the sporadic attempts in this country, in years past, to bring about some form of state medicine though they can be said to have been influential in the events which were to follow. One can begin to see the first real efforts to alter the character of medical services beginning in 1932 when the Committee on the Costs of Medical Care reported its findings, and advocated the establishment of a voluntary insurance system whereby all practice would be conducted around the hospital with groups of physicians and specialists functioning with the community physicians acting as feeders. They further proposed a central coordinating state body to control the individual practice. While socially minded leaders approved these recommendations, they naturally met with rebuff from the majority of the medical profession. For a time these recommendations languished and no further efforts were made to adopt them. Here we witness the proclivity of political expediency in adapting itself to prevailing conditions and trends. During this period a presidential election occupied the national interest and, following the election, the problems incident to the experimentation of effecting recovery engrossed the administration. Out of this experimentation there arose the question of the forgotten man and the large number of people who must be provided for. It is significant that, prior to 1930, very little was ever heard about the inadequacy of medical care. Before this time one can say that unemployment was not the major problem facing the country, and so long as men were able to find employment at a decent wage, they were also the masters of their own activities and capable of choosing their own form and kind of medical service. With the depression, the experimentations with wages, hours and, particularly, the drastic steps taken to control business in general, we find 11,000,000 workers unemployed in the nation. Manufactured work at a dismal wage has gradually sapped the independent thought of these people to the point where they are willing to accept any and all forms of benevolence so long as there is no cost attached. From a major economic problem, involving the questions of stimulation of business and production and aiding in re-employment, as well as the correction of bad housing, inadequate food, poverty and bad social conditions, the burden has been shifted to the medical profession and medicine has been made the guinea pig for weird experimentation to stay the whole economic thunderstorm by erecting the lightning rod of federalized medicine. If one can believe that one third of the population is poorly clothed, poorly housed, poorly fed and without medical care, then one can freely assert that the problem is still more social and economic than medical and constitutes a serious charge against society, but certainly not against the medical profession since they have always and will continue to provide medical care to those who need it and, more particularly, to those who seek it.

Along with these changes we note the developments toward bureaucratic medicine. Numerous corporations were entering the practice of medicine; ambitious public health programs were forming; the expansion of facilities for veteran's care in accommodating those whose disabilities were not war or service connected, indicated the advance of the government in general practice.

Then, in 1934, came the agitation for social security. Primarily concerned with the care of the aged, it soon added the relief of unemployed and finally the problem of medical care. Originally the recommendation, in regard to the latter, was the institution of a compulsory sickness insurance plan. However, the advice of a committee of distinguished physicians prevailed against this measure, and instead $10,000,000 a year was voted the Public Health Service to match sums raised by individual states for the expansion of medical care chiefly concerned with infant and maternal welfare, dentistry, heart disease, the crippled, blind, deaf and the control of venereal diseases. Some time later a special act of Congress provided up to $25,000,000 for use by the Public Health Service in the control of syphilis. Coincidentally we were made aware of the fact that, in 1932, there were four hundred and thirty organizations in the country offering or furnishing medical services on a contract basis. By 1933 more than thirty schemes for the provision of prepayment group hospital care had appeared on the medical economic horizon. These latter plans were viewed with considerable misgiving since they were evidently put forward by promoters seeking profits, and included services of the roentgenologist, anesthetist and pathologist and it was felt that sooner or later they would include the services of the surgeon, internist and obstetrician; and that with this encroachment it would only be a question of time until they would be placed on a compulsory insurance basis under bureaucratic domination, federal or state.

While we were contemplating these changing trends and endeavoring to lay down principles which should guide our reactions to them, the original Wagner bill was introduced advocating partial re-payment of wage loss due to sickness and government controlled insurance for maternity and medical services. The effect of this bill would have been to place the practice of medicine in the hands of the government where it would become a political tool for the purchase of votes, result in perfunctory and unnecessary treatment and stifle the progress of research and teaching. Fortunately this bill was never passed, one reason being that it seemed expedient at the time for Congress to adjourn and it has never since been reported out of the Committee on Education and Labor. However it still

hangs as a potential threat against the individualized practice of medicine.

With all this turmoil centering around the medical profession and a veritable typhoon of propaganda raging through the mediums of publicity concerning the inadequacy of medical care, one cannot help but marvel at the accomplishments of medicine in years past. How humanity ever survived under such conditions as the socialization advocates depicted as existing is truly a tribute to the resourcefulness of the profession. However, with these continued attacks and the dissatisfaction with a negative defensive position one begins to see, about 1935, a tendency toward abandonment of the old conservative attitude of American medicine. This was evidenced by the fact that some seven hundred and forty-eight projects of contract practice, and some two hundred experimental plans for distribution of medical care, were being carried out by local county medical societies. This situation resulted not only from the fact that the pressure was on from the social workers and politicians, and the feeling that if a workable plan to meet the situation was not developed by the medical profession that State or Federal medicine was inevitable, but also from a conviction in many parts of the country that our leadership was inadequate and not meeting the situation by progressive positive action. To the credit of the conservative element it must be stated that their insistence upon the survival of independent private practice, open competition and the maintenance of personal relations between physician and patient has done much to preserve the principles and ideals on which we base our practice of medicine.

During 1935 and 1936 we saw the beginning of numerous attempts on the part of various state legislators to establish compulsory systems of state health insurance. Since then not a year has passed during which the same type of legislation has not been attempted in some form or other in several of the different states. In 1937 we began to hear about the Interdepartmental Committee to Co-ordinate Health and Welfare Activities. This was presumed to affect co-ordination of all the various medical activities of the Government under one control, and the hope was expressed that we would find a qualified physician, in a cabinet post, directing the movements of this important phase in the development of medicine in relation to government. At this time also Miss Esther Lape edited a two-volume book, "American Medicine: Expert Testimony Out of Court," sponsored by the American Foundation. This effort strove to condense the opinions of some 10,000 physicians circularized by questionnaire, only 2,000 of whom replied, as to just what was wrong about medical care, medical education, group practice, state medicine, health insurance and allied subjects. Needless to say, the inference to be drawn was that the present situation of medicine was pretty bad. This was followed by the organization of the Committee of Physicians, a group of four hundred and thirty doctors headed by Peters, Cabot, Stokes and others, who issued their "Principles and Proposals." These indicated the health of the people as a direct concern of the government, advocated a National health policy, separated economic need from medical need, and recognized four agencies for the provision of medical care. They proposed to emphasize preventive medicine, supply public funds for indigent care, support medical education and research through the public treasury, aid hospitals rendering indigent care, and consolidate the functions of the government in relation to health in the hands of experts. Admitting the sincerity of the leaders of this movement, their views by no means represented those of general medical opinion, and they were definitely rejected by the House of Delegates of the American Medical Association. They did, however, act as a fresh stimulant to the efforts of social and welfare workers and to those not above grasping the political significance of the situation.

In 1938 we witnessed the National Health Conference give birth to the National Health Program. The accouchment can truthfully be said to have been accomplished without the aid of adequate medical care. No one who has read the reports of this meeting can feel that those most intimately concerned in these problems and in a position to present the true viewpoint of medical opinion were ever given the slightest opportunity to do so. The Conference was a pre-arranged, cut and dried steam roller presentation of a program that left no loophole for opposition. The outcome was the proposal of an expenditure of $850,000,000 a year for expanding preventive medicine, providing complete medical care for the economically indigent and for the medical indigent, construction of 500 additional hospitals and 500 diagnostic centers completely equipped and maintained, and a 4% tax levy for the setting up of a compulsory health insurance system covering all citizens of the United States. When these proposals were presented to the House of Delegates at a special session in 1938, approval was given to the expansion of preventive medicine and infant and maternal welfare where the need could be shown and accomplished through the private practitioner. It emphasized the necessity for local determination of medical needs. It opposed the assumption of government control of medical education. It favored the expansion of general hospital and medical facilities only after the utilization of existing hospital and medical facilities and where further need could be shown. It approved the complete care of the medically indigent by tax funds administered locally. It asserted as useful the principle of hospital insurance to include hospital care only. It endorsed as acceptable the principle of cash indemnity insurance to cover sickness, providing such plans complied with State laws and met the approval of county and state medical societies. It sanctioned the insurance principle against loss of wages through illness. It was in

sympathy with the establishment of a federal department of health with a representative cabinet member. It was opposed to any form of compulsory health insurance. Before these conclusions could be reached a storm of propaganda emanated from government forces to compel the American Medical Association to accept its program, and this was capped by the indictment of the Association as acting as a monopoly in violation of the Sherman Anti-Trust Act. We have seen this action progress to the stage where medicine must now stand trial on the merits of its case. Its hope must lie in the recognition of the fact that its ideals and principles and actions are based on sound doctrines of cooperation of its membership in self-discipline, and in the elevation of its own standards of practice.

In 1939 the new Wagner bill made its appearance and which now, finally boiled down and passed by the Senate, proposes the erection of 50 and 100 bed hospitals, where needed, through the appropriation of $10,000,000 for each of six fiscal years and an additional $500,000 each year for administrative expenses. In company with this legislation and awaiting action we find the Capper-Epstein compulsory and voluntary health insurance bill, the Mead bill, the Lodge bill and a host of others having medical significance. In the midst of all this propaganda and legislation to effect socialistic and radical changes in medical practice, we find innumerable local and group efforts being carried out to solve the problem of adequate medical care in a democratic manner. There are at present over 300 group-practice clinics operating in the United States; some 300 fraternal and sick benefit associations providing cheap medical care; over 2,000 industrial medical service organizations; 300 universities providing medical attention, at very low rates, for their students and faculties; and thousands of voluntary insurance plans providing for hospital care or medical services.

And so we reach the year 1940 and find much of this agitation for radical changes over-shadowed by the necessity for preparations for defense and the imminence of a national election. True to its principles of arising to meet all emergencies, American medicine has volunteered its cooperation with governmental authorities to prepare itself to take its place to meet the present crisis. To do this of necessity requires regimentation of the profession. In view of past activities, one wonders if this regimentation will not be made permanent when the emergency has passed. Perhaps the coming election holds the answer.

Thus we see in a decade a tremendous evolution in the concept of what should constitute medical practice, and a vicious revolutionary trend to bring about a socialistic change in what we consider the democratic way of life in America. Political influences have already effected changes far beyond the legitimate province of government in the practice of medicine. Federal and state public health agencies have invaded deeply into the fields of private practice. Social workers, welfare workers, legislators and job seekers continue an unending program of propaganda to bring the practice of medicine under complete dominance of federal or state administration.

Against all this, the American Medical Association has thrown up a bulwark in advancing its PLATFORM for a just and equitable solution of the manifold problems confronting us. We cannot be deceived into an attitude of complacency. The situation confronting us is serious and requires the utmost cooperation and determined action if we are to prevent the influences conspiring against us from succeeding in bringing about our submission. We carry the standard of medicine because of our faith and loyalty to its ideals, and we believe these are sound and worth fighting for. Our fundamental precepts are sustained in the granite of freedom, our faith is sublime and will not falter in the fires of political and social invasion. We have a noble, God-given profession, and we will uphold its traditions.

137 RIMBACH STREET.

ABSTRACT: PRESENT ADDED EVIDENCE OF VALUE OF VINETHENE ANESTHESIA

Additional evidence of the value of vinethene, a quick acting anesthetic chemically related to ether, is presented in *The Journal of the American Medical Association* for October 19 by Huberta M. Livingstone, M.D., Geraldine A. Light, M.D., A. Fausteena Heidrick, M.D., and Vera N. Kable, M.D., Chicago.

Vinethene is an anesthetic administered in the same way as ether but differing from the latter in the rapidity of its action. This property necessitates special caution in its administration because it is easy to pass from the stage required for surgery to that of dangerous overdosage. Its value lies in its rapid action and the prompt recovery which follows the administration of the drug.

"The use of this rapidly acting agent," the four physicians say, "should have its place in war surgery, particularly in areas free from fire and explosion hazard. Short, painful procedures can be satisfactorily cared for under this agent, and the rapid return to complete consciousness will lessen the postoperative care."

The authors say that: "From clinical experience in 2,050 administrations we feel that vinethene anesthesia, particularly for short operations when patients are to be ambulatory soon thereafter, and as an induction agent when indicated, has a definite place in the surgical armamentarium. The simplicity of administration and the infrequency of complications when employed by experienced anesthetists warrant the serious consideration of its use. Vinethene makes an excellent general anesthetic agent for office and outpatient practice; however, as with all anesthetic agents, a suction device and a supply of oxygen and apparatus for its efficient employment should be available. Although no explosions or fires have thus far been reported, precautions must be taken as it is inflammable and explosive."

THE ROENTGENOLOGICAL ASPECTS OF PULMONARY MYCOTIC INFECTION

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The most recent discussion of fungous disease of any region of the body appearing in THE JOURNAL is dated October, 1911, and only indirectly are any systemic manifestations of the disease mentioned therein.[1] The pulmonary manifestations of fungous disease is a subject in which considerable progress has been made from the diagnostic viewpoint and more particularly have the roentgenological aspects been given due attention of late, notably by Fawcitt,[2] Carter,[3] Brooksher,[4] and most recently by Reeves.[5]

Even the roentgenological literature is singularly limited in regard to the roentgenographic diagnosis of fungous disease of the lung. It would seem that there is nothing definitely pathognomonic in roentgenograms of this group of pulmonary diseases and that roentgen diagnosis of the condition is dependent on excluding pulmonary tuberculosis—which the mycoses simulate so closely—and finding certain roentgenographic changes in the lung *associated with* the presence of the causative fungus cultured from the sputum, bronchoscopic specimen or by animal inoculation.

The purpose of this paper is to attempt to describe what is so far agreed upon as the roentgenological detail of the lungs considered diagnostic of this condition and also to awaken in the general practitioner a keener appreciation of the prevalence of the pulmonary mycoses and to urge more widespread attempt at early diagnosis since practically the only opportunity for cure is before massive infection, profuse metastasis or chronic widespread involvement has occurred. This phase of the subject has the same practical importance as the early diagnosis of pulmonary tuberculosis. Hence the subject should receive much more attention than has been accorded it in the past.

Briefly, the science of mycology dates back to the year 1677 when Hooke discovered that the yellow spots found on the leaves of roses consisted of filamentous fungi; but it was not until 1839 when Langenbeck discovered the Oidium albicans—the fungus of thrush—and found it to be parasitic to man that the medical profession recognized the existence of fungous disease.

It is outside the scope of this paper to describe any of the features of classification, life history or morphological characteristics of the fungi. A great deal has been written on the subject and reference should be made to the more recent works, namely those of Jacobson,[6] Dodge,[7] Castellani,[8] and Gueguen.[9]

For our discussion the practical classification of the bronchomycoses devised by Castellani[10] in his definitive study of this subject already referred to should be reviewed. He classifies them in simple language as follows:

(1) Due to yeast-like fungi, viz., fungi of the types Monilia, Torula, Saccharomyces, Blastomycoides, Endomyces and Cryptococcus.

(2) Due to filamentous fungi: (a) of slender type—Nocardia, Anaeromyces and Vibriothrix, (b) of larger type—Oidium and Hemispora (c) with characteristic fructifications—Aspergillus, Penicillium, Mucor, Rhizomucor, Sporotrichum, etc.

The types of fungi involved in pulmonary mycoses vary considerably and vary geographically—types of fungi predominating in pulmonary lesions are quite different in different sections of the United States. For example, a great many of the cases in this section of the country are due to Monilia and Blastomycoides, while in primarily agricultural regions Mucor, Sporotrichum and other members of the filamentous group predominate. Coccidiodal granuloma is most prevalent in the State of California.

A word about the search for the causative fungus and the establishment of its pathogenicity in these cases is in order. The statement that fungi when found in cases suspected clinically and roentgenologically of having bronchomycosis is not conclusive and does not prove or establish the diagnosis is neither a fair nor a true one. It arises from the misconception in the minds of many physicians that fungi are so frequently a contaminant of sputum specimens—from the air, dust and even the patient's saliva—that direct cause and effect relationship cannot be established. The concensus among bacteriologists and mycologists is to the contrary. When the fungi are found on sputum examinations

[1] Austin, Maynard, A.: Cutaneous Blastomycosis, *Jour. Ind. State Med. Assoc.*, **iv**, pp. 436-439, Oct. 1911.

[2] Fawcitt, Richard: The Roentgenological Recognition of Certain Bronchomycoses Involving Occupational Risks, *Am. Jour. Roentgenol. and Rad. Ther.*, **39**, pp. 19-31, Jan. 1938.

[3] Carter, R. A.: Pulmonary Mycotic Infections, *Radiology*, **26**, pp. 551-562, 1936.

[4] Brooksher, W. R. Jr.: Blastomycosis of the Lungs, *South. Med. Jour.*, **25**, pp. 412-415, 1932.

[5] Reeves, Robert J.: The Roentgenological Significance of Bronchomycosis—Case Reports, *South. Med. Jour*, **33**, pp. 361-366, April, 1940.

[6] Jacobson, H. P.: Fungous Diseases. Chas. C. Thomas, Springfield, Ill. 1932.

[7] Dodge, C. W.: Medical Mycology—Fungous Disease of Man and Other Mammals, 1936.

[8] Castellani, Aldo: Fungi and Fungus Diseases, 1928.

[9] Gueguen, F.: Les Champignons parasites de l'Homme et des animaux, 1904.

[10] Castellani, Aldo: loc. cit.

they prove to be in sufficient numbers to establish pathogenicity and may be cultured on Saboraud's medium and if required may from this be inoculated into laboratory animals (a procedure that is rarely necessary). It is true that they can be identified in many instances only after thorough and persistent search, a trait in which they do not differ from the tubercle bacillus itself. However, too often the presence or absence of tubercle bacillus is all that is sought on sputum examination, which is unfortunate from both the diagnostic and therapeutic standpoint since the administration of potassium iodide—an actual fungicide in large doses[11]—greatly relieves the early symptoms of the disease and in not a few instances brings about a cure. Blood and urine cultures, likewise, may yield the causative fungus and should be studied.

A brief review of the general pathological features of the most commonly encountered bronchomycoses will greatly facilitate an understanding of the roentgen pathology. The fungi may attack any region of the body, most frequently the skin. The fungous infections of the lungs are becoming much more common and Castellani[12] several years ago divided the mycoses clinically into two large groups, internal (systemic or pulmonary) and external (dermatomycoses).

Perhaps the first mycotic lung infections to be recognized were blastomycosis and actinomycosis. Pathologically the internal group are all granulomas, eliciting much the same tissue response as the tubercle bacillus. Actinomycosis of the lungs appears grossly as a collection of small abscess cavities somewhat suggestive of bronchiectasis but they are more widely distributed, their walls are not so smooth, they are more numerous and their size is more uniform. Blastomycosis has the same general pathological picture—granulomatous nodules appear which break down and form abscesses.

Bronchomycoses studied more recently are: coccidiodal granuloma, moniliasis and streptotrichosis. Coccidiodal granuloma is a mycosis derived from the soil and enters the body by way of the skin or lungs with equal frequency. It may be acute or chronic and is primarily a granuloma with a marked tendency to spread and prove fatal. Destruction of osseus tissue is a characteristic feature. When the lungs are involved miliary, submiliary and occasionally larger nodules are formed and go through the processes of caseation, liquefaction and cavitation; there is widening of hilar and mediastinal regions and the miliary lesions grossly infiltrate the parenchyma and thicken the pleura.

The causative fungus in moniliasis (the Monilia) most frequently produces a local infection, often in the oropharynx (much like thrush) and occasionally elsewhere as in the middle ear, nasal sinuses, vulvovaginal tract, etc. The pulmonary infection is usually a mild mycotic disease with a chronic course but the pathology may range from a mild bronchitis to a consolidating pneumonic process. The essential pathology in the lung is a peribronchiolar infiltration, and quite often a bronchiectatic fibrosis. Massive infection with Monilia can produce a bronchopneumonic-like appearance from coalescence of these peribronchiolar infiltrations.

Streptotrichosis is caused by involvement of the lung from a group of allied fungi, the organisms Sporothrix, Streptothrix and psuedo-actinomycosis. The pathological features are practically identical with those of actinomycosis.

Torulosis is the fungous disease best known for its tendency toward fatal meningeal involvement. The action of the Torula organisms upon pulmonary tissue, however, results in the production of extensive nodular consolidations studding the bronchi. The tendency to fibrosis predominates over caseation, hence, abscess formation is not the rule.

It can readily be understood from the foregoing remarks that the roentgen pathology is as varied and protean in the bronchomycoses as in pulmonary tuberculosis. Those fungous infections having associated osseous lesions of the bones of the thorax, of course, are more readily differentiated from tuberculosis, the other mycoses less readily differentiated by primary roentgenographic features. Because of this the diagnosis can seldom be made from the roentgenograms alone but there is no other disease of the lungs in which the roentgenological manifestations are of such preeminent service in promoting the proper laboratory examinations and bacteriological study. The successful handling of these cases requires complete cooperation between clinician, roentgenologist and the pathologist who is reasonably efficient in mycology.

The clinical picture of the bronchomycotic patient presenting himself for diagnosis is, in typical instances, as follows: A young adult (average age in second or third decade) who may be male or female with equal frequency (statistically) comes complaining of cough of many months duration and of an increasing dyspnea on slight exertion producing very evident distress. The cough is usually productive of scanty mucopurulent sputum (occasionally blood-tinged), the odor of which has in some cases been compared to that of brewer's yeast. Progressive loss of weight, easy fatigability, daily elevations of temperature (usually in the evening) and severe night sweats are all frequently mentioned symptoms compelling the physician to eliminate pulmonary tuberculosis as a diagnostic possibility. Usually the onset of symptoms is quite insidious and the patient does not become acutely ill. There are rarer instances, viz., streptotrichosis and certain types of Monilia, where there are acute

[11] The use of iodine as a fungicide should be in the form of 25% solution of potassium iodide of which 4 cc. are given four times a day gradually increasing to 25 cc. Failing in this, ethyl iodide inhalations (0.5 cc. increasing to 3 cc. three times daily) will bring about improvement in most obstinate cases. Early or advanced cases can be cured if treatment is pushed and cases are thoroughly followed roentgenologically.

[12] Castellani, Aldo: Internal Mycoses, Medical Clinics of North America, vol. 11, pp. 1123-1169 (March) 1928.

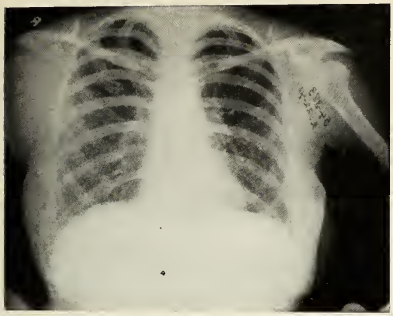


Figure 1.

This case proved to be bronchomycosis caused by Rhizomucor —a rare fungus in this locality.

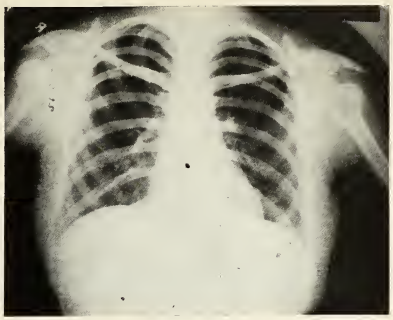


Figure 2.

Marked improvement on iodide therapy resulting in generalized fibrosis both bases.

onset and clinical features closely resembling an extensive pneumonia.

Physical examination will not reveal very definite chest findings ordinarily—occasional rales may be heard limited to the lower lung fields (in contradistinction to apical or subapical rales of tuberculosis).

Laboratory studies will reveal leukocytosis in proportion to the degree of infection. The sedimentation rate is accelerated—the increase in rate paralleling the degree of infection. The sputum examination is the most important procedure and such examinations usually being made for the tubercle bacillus (as they should be) are repeatedly negative. It is this finding in conjunction with the tuberculosis-like symptomatology that should prompt the clinician to make diligent search for a pathogenic fungus. Cultures of blood and urine should not be omitted in this search. The roentgen examination all too frequently is the *initial* laboratory procedure which directs the physician to the possibility of a diagnosis of bronchomycosis.

It is to the roentgenographic characteristics of this interesting group of pulmonary diseases that we are now prepared to turn our attention. In this connection we should like, also, to record some of our own observations from the study of our series of bronchomycotic roentgenograms. These cases need not be thought too rare for routine consideration in roentgen diagnosis for undoubtedly too many cases pass unrecognized. It is our belief that the incidence of bronchomycosis is in all probability a great deal higher than is now supposed. Failure to recognize roentgenograms of these diseases may lead to the patient being diagnosed pulmonary tuberculosis and being referred to a sanatorium with disastrous results to the patient for bronchomycotics are very prone to secondary infection, especially with the tubercle bacillus. This aspect of the problem is quite comparable to the relationship known to exist between silicosis and pulmonary tuberculosis.

Few important studies have been made attempting to describe the characteristic roentgenological detail of the lungs in fungous disease. Carter[3] compared the roentgenograms of pulmonary mycoses available in his series with the various detailed types of roentgen pathology established for pulmonary tuberculosis, citing ratios between the incidence of cavities, linear fibrosis, mediastinal adenopathy, miliary manifestations, pleural and pleuro-pulmonary lesions in the mycoses as compared with the tuberculosis roentgenograms and concludes his excellent article with a list of the accepted roentgen characteristics that point toward the diagnosis of bronchomycosis. The roentgen manifestations in the pulmonary mycoses are as varied as in tuberculosis itself. However, speaking in general terms, the radiographic appearances are those of a fine mottling throughout both lung fields, the apices being clear, together with a considerable amount of emphysema superseded by a generalized fibrosis as the condition improves, or associated with fibrous rings walling off small cavities or surrounding calcified nodules (Figs. 1 and 2). The changes this fine mottling may undergo by fibrosis and calcification of nodules can be very confusing with the roentgen picture of silicosis as stated by Pancoast and Pendergrass.[13] They report, "Most of the mycotic infections of the lungs with which we have had any personal experience have produced appearances simulating the nodular phase of pneumoconiosis but occasionally they may be confused with the peri-vascular peri-bronchial-lymph node aspect of the condition (pneumoconiosis). The differentiation may be most difficult. . . ."

Of course the lung detail on the films varies from case to case and from one type of mycosis to another, and though it simulates most closely some manifestation of tuberculosis it may be stated

[13] Pancoast, H. K., and Pendergrass, E. P.: Roentgenological Aspects of Pneumoconiosis and Its Differential Diagnosis, *Jour. Am. Med. Assoc.*, vol. 101, pp. 587-592, 1933.

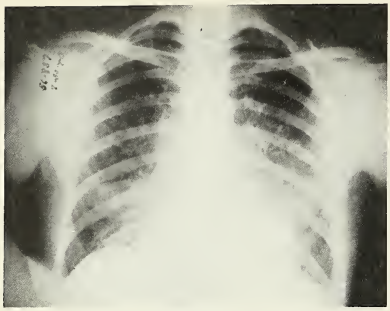


Figure 3.

This is the more usual type of bronchomycotic roentgenogram seen in this locality. This patient is clinically much improved on iodide therapy though sufficient time has not elapsed to bring about change in roentgen appearance of lung.



Figure 4.

Note the definite cloudy parenchymal densities in right mid-lung field and in lower left lung field.

emphatically that, on the whole, it simulates only the minority characteristics of this disease as seen in roentgenograms (Fig. 3).

Some of the important considerations adding to the likelihood of a diagnosis of bronchomycosis from the roentgenographic standpoint are:

1. Absence in the adult of an obviously older apical or subapical lesion from which the remainder of the involvement could have spread bronchiogenically.

2. Lesions of bone or soft tissue shadows of abscess about the thorax.

3. Extension of involvement through the thoracic wall either from within or from without.

4. Outstanding mediastinal or hilar adenopathy in the adult or miliary lesions, vague or profuse, associated with adenopathy in the adult.

5. Absence or sparsity of dry air-containing cavities in advanced lesions.

6. Hilar, truncal and peribronchial thickenings with minor parenchymal changes associated with mild chronic clinical symptoms and considerable expectoration.

7. Fine discrete miliary or nodular manifestations associated with fine peribronchial accentuation in absence of a cause for pneumonconiosis.

8. Cloudy parenchymal densities accompanying a subacute, persistent (months) respiratory attack more indefinite than in the usual tuberculosis roentgenograms which neither resolve nor evolve into the more usual manifestations of tuberculosis (Fig. 4).

9. Bronchiectatic manifestations.

10. Lastly the observation made some time ago by Dunham[14] should be quoted as a helpful description of lung detail seen in blastomycosis—a very frequent bronchomycosis here in the Middle West. "There is a characteristic studding which follows one or more of the main trunks but usually does not quite reach the periphery from which they are separated by an area of clouded lung density. Thickened pleura may be demonstrated."

All cases referred to us for roentgen examination were thought to be suffering from pulmonary tuberculosis by the referring physician. The failure to make search for fungi after repeated negative reports for tubercle bacillus forces the conclusion that special sputum examinations and cultures should be done on all patients with unidentified pulmonary lesions.

Of major interest in our series was the encouraging observation that a considerable number of bronchomycoses which got off to a very belated start diagnostically and therapeutically (some of the cases having had an eight to twelve months duration of symptoms) showed marked improvement on serial roentgenograms made over a twelve to fifteen months treatment period. This argues for the extreme likelihood of the fungous diseases prevalent in our area being of milder character than those discussed in other reports, [2, 3, 5] and the obvious conclusion that even better results can be obtained by earlier diagnosis.

SUMMARY

1. A brief review of the mycology, pathology and clinical features of the bronchomycoses is presented.

2. The roentgenological manifestations pointing toward a diagnosis of fungous disease of the lung are enumerated.

3. Observations on our own series of cases reemphasizes: (a) the close similarity of these diseases to tuberculosis both clinically and roentgenologically, (b) that roentgen manifestations no matter how inconclusive or difficult to interpret are of service if they promote bacteriologic study for the fungus, (c) that cases can be cured if treatment is pushed and the cases are thoroughly followed by serial roentgenograms.

4. This paper is presented in the hope that it will stimulate more diligent search for bronchomycoses by clinician, pathologist and roentgenologist.

[14] Dunham, K.: Stereoroentgenography of the Chest, The Southworth Company, Troy, N. Y., 1917.

AURICULO-VENTRICULAR HEART BLOCK WITH STOKES-ADAMS' SYNDROME IN A PATIENT WITH SYPHILITIC HEART DISEASE AND DIFFUSE MYOCARDITIS*

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The following is a report of a case in which syphilitic heart disease with aortic insufficiency and congestive heart failure was complicated by auriculo-ventricular heart block and Stokes-Adams' attacks. The patient died during an attack and at autopsy a lesion, consistent with but not specific for diffuse syphilitic myocarditis, was found in the interventricular septum. Wilson[1] has reported a case similar to this, but most cases of heart block in syphilitic heart disease that have been reported have been associated with localized gummata of the interventricular septum.

REPORT OF CASE

History: The patient was first seen at night on May 21, 1938, after having been awakened by a paroxysm of nocturnal dyspnea. He had been having similar attacks of increasing severity for about a week. For the previous two years he had noticed increasing dyspnea while playing golf and his wife had noted a similar difficulty with regard to his dancing. Otherwise, there had been no notable discomfort. At the age of 17 the patient had had a penile lesion for which he received local treatment only. He was married, had no children, and the past and family histories were otherwise non-contributory. There was no history of rheumatic fever, diphtheria, or other severe infectious disease.

Physical Examination: The temperature was normal. The patient was a well-developed, well-nourished white male of athletic habitus who appeared to be his given age of 43. He was moderately orthopneic. The pupils were equal, regular, and reacted promptly to light and accommodation. The eye-grounds showed no abnormalities. All teeth had been removed. There was moderate engorgement of the jugular veins with the patient in a semi-recumbent position. Expansion of the thorax was fairly full and equal, and the respirations numbered twenty-six per minute. There was impairment of resonance to percussion over both lung bases posteriorly and numerous medium moist rales were heard in these areas. A systolic pulsation was readily visible in the peripheral arteries and capillaries. The radial pulses were collapsing in quality and there were occasional irregularities. Both the radial pulse and the heart rate were 88, the blood pressure 212/0. The point of maximum impulse was a forceful heave occupying a wide area extending to the left anterior axillary line in the fifth and sixth interspaces. A systolic thrill was felt over the aortic area. The area of precordial dullness extended to the anterior axillary line in the fifth and sixth interspaces on the left and was within normal limits on the right. The heart sounds were impaired in quality and showed the same irregularities as the pulse. A soft, low-pitched diastolic murmur of short duration was present in the aortic area and transmitted along the left border of the sternum. A somewhat harsher systolic murmur was present also in the aortic area and transmitted into the vessels of the neck. A soft untransmitted systolic murmur was present at the apex. The liver and spleen were not enlarged and there was no dependent edema. The remainder of the physical examination, including neurologic examination, revealed no significant changes. A penile scar could not be demonstrated.

Laboratory: The specific gravity of the urine was 1.027, albumin was marked and a few finely granular casts and leucocytes were present. The hemoglobin determination and examination of the blood cells showed no abnormalities. The Kolmer and Kline tests of the blood serum were 4 plus.

An x-ray of the chest taken at a distance of six feet revealed a boot-shaped heart with marked enlargement to the left and evidence of considerable passive hyperaemia of the lungs. The aorta did not appear to be enlarged. The cardiac shadow measured 12.6 cm. to the left of the midline and 4.4 cm.

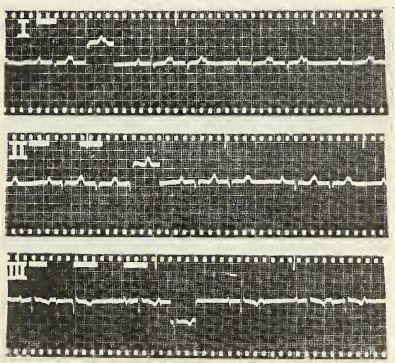


FIG. 1

Electrocardiogram (May 22, 1938) showing second degree heart block. Auricular rate, 90. Ventricular rate, 54. P-R interval, .32 sec. Time marker, 0.20 sec. and 0.04 sec.

* From the Department of Medicine, The South Bend Clinic, South Bend, Indiana.

[1] Wilson, W. J.: Report of a Case of Complete Heart Block with Autopsy Findings; Syphilitic Myocarditis and Aortitis, *Ann. Int. Med.*, **2**: 669, 1929.

to the right. The internal diameter of the thorax was 25.8 cm.

An electrocardiogram (Fig. 1) taken the morning after the patient was first seen showed second degree heart block. The P-R intervals were lengthened. The auricular rate was 90 and the ventricular rate 54. There was no axis deviation and the T waves were normal.

Clinical Course: The patient was given complete bed rest and 0.1 grams of digitalis daily without first having been digitalized. He was also given 1 gram of potassium iodide three times daily. After ten days signs of cardiac decompensation had disappeared and the patient was allowed in a chair for short intervals. During this period, the beating of the heart was for the most part regular, but the rate varied widely from time to time between 88 and 56. The systolic blood pressure ranged between 140 and 150 and the diastolic blood pressure between 0 and 30. On June sixth, while lying in bed, the patient suddenly became apprehensive, confused, and pale. He complained of a feeling of heaviness in the chest and a burning sensation in the shoulders and arms. The pulse rate had dropped to 22 and for a moment he could not be aroused. He was given 0.4 milligrams of atropin sulphate followed by 0.5 grams of caffein sodium benzoate. When examined one-half hour later, he was comfortable and the heart was beating regularly at a rate of 80 beats per minute. Digitalis therapy was discontinued, but the patient continued to receive the same amounts of potassium iodide. During the next week the heart maintained a rate varying generally between 40 and 50 beats per minute. The beating was for the most part regular. There were, however, frequent occasions during which the rate dropped below 30. Such periods, usually of less than two minutes' duration, caused the patient much discomfort and he complained of anxiety, nausea, vomiting, and hot flushes passing over his chest and into his head. On a few occasions he lost consciousness momentarily, but no convulsive movements were noted. As few as eight ventricular contractions were counted in a 30-second period with approximately three seconds elapsing between contractions. During such periods two to three auricular contractions which were synchronous with the main jugular pulsations could be heard. It was during these periods of ventricular inactivity that the patient experienced hot flushes. Amytal (.05 grams) and ephedrine (.025 grams) were given three times a day but without definite effect. On June twelfth the patient suddenly became restless, nauseated, and confused. His heart rate ranged between 24 and 28, and the pulse became almost imperceptible. He lost consciousness and a few minutes later respiration ceased.

Autopsy: The heart was enlarged, weighing 860 grams. Hypertrophy was confined to the left ventricle which was also dilated and showed flattening of the trabeculae carnae. The mitral valve was without noteworthy lesion. The aortic valve showed marked insufficiency. The aortic cusps were markedly sclerosed and there was thickening along the borders with widening of the commissures. The ascending portion of the arch of the aorta showed arteriosclerotic patches with a few areas of mingled striations, but was otherwise not remarkable. There

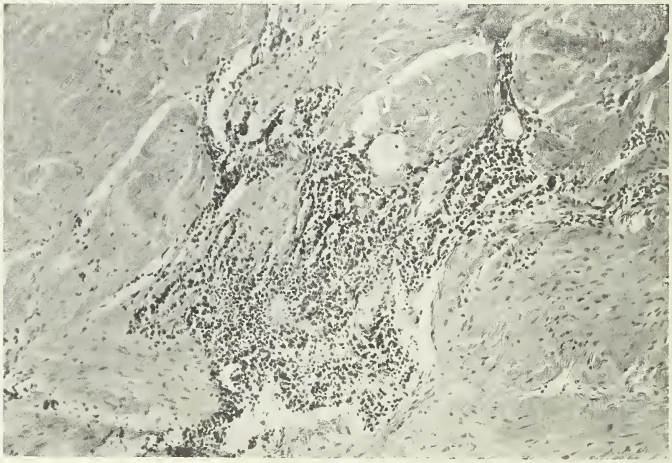


FIG. 2

Section through the upper part of the muscular portion of the interventricular septum. There is hypertrophy of the muscle fibers. An area is shown in which there is muscle destruction and a perivascular round cell infiltration extending into the muscle tissue. There is also a slight degree of fibrosis.

was no encroachment on the coronary orifices and the coronary arteries were smooth and patent throughout. The lungs were air containing throughout, and both apices contained healed scars. Aside from moderate passive hyperaemia of the liver and spleen, examination of the abdominal organs revealed no significant lesions. The post-mortem spinal fiuid yielded a 4 plus Wassermann reaction.

Microscopic examination of the heart showed marked hypertrophy of the muscle fibers. There were areas of muscle destruction in which dense accumulations of plasma cells and round cells were seen along blood vessels and infiltrating the surrounding tissue. A small amount of fibrous tissue proliferation was also present. Figure 2 is from a section taken through the upper part of the muscular portion of the interventricular septum. It transects both branches of the bundle of His but does not show any conducting tissues. Because of technical limitations, it was not possible to make detailed histopathologic studies of the conducting system. There was no evidence of endarteritis in any of the three microscopic sections of ventricular myocardium that were studied, and a search for spirochetes in two sections was unsuccessful.

DISCUSSION

The patient's presenting symptoms were due primarily to aortic insufficiency and failure of the left ventricle which subsequently compensated under treatment. During the course of the illness, however, it became evident from physical and electrocardiographic manifestations that in addition there was a progressive lesion involving the conducting system and causing frequent transitions between partial and complete heart block. It is doubtful if digitalis in the amounts given was a very significant factor either in the development of further auriculoventricular dissociation or in the improvement of compensation.

Clinically, the most likely explanation for the disturbance in conduction seemed to be that of a localized gumma in the interventricular septum. A somewhat less likely explanation seemed to be that of a diffuse inflammatory process of syphilitic origin in the myocardium with involvement of the conducting system. A third possibility was that of syphilitic endarteritis at the coronary orifices or along the course of the coronary arteries and their branches with secondary changes in myocardial tissue. A diastolic blood pressure of 0 might have been an added factor in diminishing the blood supply to the myocardium. Arteriosclerotic changes were considered unlikely as an etiologic factor because of the age of the patient, although coronary thrombosis either on an arteriosclerotic or a syphilitic basis was a possibility. There was no apparent reason to believe that other inflammatory or toxic agents were responsible.

At autopsy, a localized gumma was not found and the coronary arteries did not show pathologic changes as far as could be determined. There were, however, in addition to evidence of aortic insufficiency, areas of acute and chronic inflammation in the ventricular myocardium which were especially severe in the interventricular septum. It seems likely that such a lesion was responsible for the disturbance in conduction. The lesion itself is a non-specific organic reaction that might have been in response to any one of several types of disease processes, either infectious, vascular, or toxic, but whether or not it is of syphilitic origin is a question that cannot be answered. The apparent absence of other etiologic factors tends to lend weight to such a possibility. Virchow recognized the possibility that syphilis could cause this type of lesion but foresaw difficulties in proving it. In spite of advances in staining techniques, many of these difficulties still exist. If spirochetes had been found in the myocardial tissue or blood vessels, they would have been a distinct diagnostic aid. On the other hand, their absence does not rule out the possibility of a syphilitic etiology especially since spirochetes are found more frequently in necrotic tissue than in a healing lesion such as this.

SUMMARY

A case presenting clinical and post-mortem evidence of syphilitic heart disease with aortic insufficiency, cardiac enlargement, and congestive heart failure is reported. The illness was complicated by auriculo-ventricular heart block and Stokes-Adams' attacks. The patient died during an attack, and at autopsy a diffuse myocarditis was found in the interventricular septum. The combined clinical, laboratory, and autopsy findings point to syphilis as a possible etiologic agent for the production of the lesion and its accompanying disturbance in conduction, but conclusive proof is lacking.

THE RELATIONSHIP BETWEEN VARIOUS TYPES OF KIDNEY DISEASE AND HYPERTENSION

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The renal pathogenesis of certain types of arterial hypertension has been suspected especially since Goldblatt, Lynch, Hanzal and Summerville[1] demonstrated that constriction of the main renal artery in the dog was followed by a persistent elevation of blood pressure. Subsequently, Page[2] found that upon compression of the dog's renal parenchyma in the fibro-collagenous scar that resulted from wrapping the kidneys in silk or cellophane also caused hypertension.

Even though both these experimental methods are such as might restrict the blood flow through the kidneys, it appears likely that renal ischemia is not necessary in eliciting hypertension. Except for the terminal phase of experimental hypertension, renal blood flow as measured from the clearances of phenol red and inulin is not always reduced (Corcoran and Page[3]). The same is occasionally true of hypertension in human beings. Since these clearances are measures of renal blood flow, their normal values in hypertension indicate that renal ischemia in the ordinary sense of the term does not itself cause hypertension.

Kohlsteadt and Page[4] have shown that the stimulus to the liberation of renin from the kidneys is reduction of pulse pressure and not reduction of blood flow. Therefore, if we accept the view that renin is the parent substance of the humoral system involved in the genesis of hypertension, clinical investigation might well be directed toward finding which diseases of the kidney are capable of producing a reduction of pulse pressure within that organ.

A possible clinical correlation of these experimental observations has been made in one form of kidney disease by Longcope,[5] who noted that patients with chronic pyelonephritis developed hypertension.

This observation was extended by Barker and Walters[6] and Weiss and Parker,[7] who found that partial arterial obliteration occurs widely around areas of pyelonephritis in human beings. Such arterial obliteration would necessarily decrease pulse pressure or blood flow to the affected areas and might, therefore, result in the liberation of renin. Weiss and Parker[8] estimated that 15 to 20 per cent of patients with malignant hypertension had evidence of pyelonephritis, yet Pearman, Thompson and Allen[9] found an incidence of only 1.125 per cent in 12,000 hypertensives.

The relationship of almost every other form of kidney disease to hypertension has been vague and sometimes problematical. Leadbetter and Burkland[10] have reported a case in an eight-year-old boy with an ectopic right kidney whose main renal artery was partially occluded by a plug of smooth muscle. Surgical removal of his kidney resulted in a return to normal of blood pressure. Leiter[11] and Boyd and Lewis[12] have reported cases of hypertension associated with unilateral renal infarction. Butler[13] and Barker and Walters[14] have reported cases of unilateral chronic atrophic pyelonephritis in which the blood pressure returned to normal following the removal of the offending kidney. However, these cases are quite rare. Fish and Schroeder[15] have shown that unless the blood pressure elevation is recent and the disease process definitely limited to one kidney, nephrectomy is a very dangerous procedure. Palmer, Chute, Crone

[1] Goldblatt, H., Lynch, J., Hanzal, R. F., Summerville, W. W.: Studies on Experimental Hypertension; Production of Persistent Elevation of Systolic Blood Pressure by Means of Renal Ischemia. *J. Exper. Med.*, **59**:349, 1934.

[2] Page, I. H.: The Production of Persistent Arterial Hypertension by Cellophane Perinephritis. *J.A.M.A.*, **113**:2046, 1939.

[3] Corcoran, A. C. and Page, I. H.: Observations of the Relations of Experimental Hypertension to Renal Clearance and Renal Ischemia. *A. M. J. Physiol.*, **1234**:43, 1938.

[4] Kohlstaedt, K. G., and Page, I. H.: Production of Renin by Constricting Renal Artery of an Isolated Kidney Perfused with Blood. Proc. Soc. Ex. Biol. and Med., **43**:136, 1940.

[5] Longcope, W. T.: Chronic Bilateral Pyelonephritis: Its Origin and Its Association With Hypertension. *Ann. Int. Med.*, **11**:149, 1937.

[6] Barker, N. W., and Walters, W.: Hypertension Associated with Unilateral Chronic Atrophic Pyelonephritis Treatment by Nephrectomy.

[7] Weiss, S., and Parker, F.: Vascular Changes in Pyelonephritis and Their Relation to Arterial Hypertension. Trans. Assoc. Am. Phy., **53**:60, 1938.

[8] Weiss, S., and Parker, F.: Pyelonephritis: Its Relation to Vascular Lesions and Arterial Hypertension. *Medicine*, **18**:221, 1939.

[9] Pearman, R. O., Thompson, G. J., Allen, E. V.: Unusual Hypertensive Renal Disease; Occlusion of Renal Arteries. (Goldblatt Hypertension): Anomalies of Urinary Tract. *Proc. Staff Mayo Clin.*, **15**:467, 1940.

[10] Burkland, C. E., and Leadbetter, W. J.: Hypertension in Unilateral Renal Disease. *J. Urol.*, **39**:611, 1938.

[11] Leiter, L.: Unusual Hypertensive Renal Disease. *J.A.M.A.*, **111**:508, 1938.

[12] Boyd, C. H., and Lewis, L. G.: Nephrectomy for Arterial Hypertension. (Preliminary Report) *J. Urol.*, **39**:627, 1938.

[13] Butler, A. M.: Chronic Pyelonephritis and Arterial Hypertension. *J. Clin. Invest.*, **16**:889, 1937.

[14] Barker, N. W., and Walters, W.: Hypertension and Chronic Atrophic Pyelonephritis. *Proc. Staff Mayo Clin.*, **15**:475, 1940.

[15] Fish, G. W., and Schroeder, H. A.: III. Effect of Nephrectomy on Hypertension Associated with Organic Renal Disease. *Am. J. Med. Sci.*, **199**:601, 1940.

and Castleman[16] have also stressed the dangers following unilateral nephrectomy. This clinical observation has its experimental counterpart in dogs, in which compression of both renal arteries may produce hypertension, but removal of one of the kidneys may cause a further elevation of blood pressure and the onset of malignant hypertension.

Schroeder and Steele[17] found that 50 of 71 patients with "essential" hypertension showed pyelographic abnormalities—36 of these exhibited hydronephrosis; 5 had nephrolithiasis. Much attention has since been paid the pyelograms of hypertensive patients. Maker and Wosika,[18] however, found only 16.8 per cent of 600 patients with hypertension had demonstrable urological lesions. Palmer, Chute, Crone and Castleman[19] found that 22 per cent of 212 patients with hypertension had definite pyelographic abnormalities.

OBSERVATIONS

In an effort to determine whether any causal relationship existed between urological abnormalities and arterial hypertension, two methods of approach were used.

From the Methodist Hospital in Indianapolis, data were gathered from the charts of patients who showed urinary developmental anomalies. These findings are recorded in table I. There are 4 cases with blood pressure elevation, ranging in age from 45 to 69. This is an incidence of hypertension of 14.2 per cent. Robinson and Brucer[19] in an analysis of 10,883 persons found an incidence of 13.3 per cent of arterial hypertension. It would appear, therefore, that persons with renal anomalies are not appreciably more subject to the development of hypertension than are normal people.

It may be noted from the table that this series includes no case in which the sole finding was roentgenographic evidence of aberrant artery to the kidney because it was felt that such diagnosis was only presumptive. Wishard[20] found in five cases of aberrant renal artery that the blood pressures were below 140 systolic and 90 diastolic. These cases were confirmed by surgical exploration because the aberrant vessel was obstructing the flow of urine.

Another approach to the problem was made from a group of cases who had been admitted to the Indianapolis City Hospital from 5 to 10 years ago (see Table II) suffering from hydronephrosis or

TABLE I

Case No.	Age	Diagnosis	Blood Pressure
1	20	Congenital Double Right Kidney	100/62
2	39	Right double Kidney with duplication of renal pelvis	120/80
3	33	Double Right Kidney, Early Hydronephrosis	116/80
4	45	Duplication Right Kidney, Pelvis, Ureter. Dilatation of the ureter.	160/100
5	52	Bilateral Double Kidney Pelves with bilateral double ureters.	96/60
6	57	Duplication upper ureter and pelvis on right. Pyelitis and kinked double ureter.	140/90
7	44	Bilateral complete duplication renal pelves and ureters.	120/80
8	69	Duplication left Renal Pelvis and Ureter.	160/80
9	72	Duplication Left Renal Pelvis with enlargement of kidney.	120/56
10	27	Double Ureter, Bilateral.	122/84
11	58	Duplication Left Renal Pelvis.	132/60
12	10	Duplicate Pelves and Ureters above L4 Vertebra.	110/70
13	40	Ureteral Stricture Upper Ureter, Right. Bilateral duplication ureters, kidneys.	104/72
14	32	Left Bifid Renal Pelvis.	100/76
15	45	Complete duplication Renal Pelvis, Ureter. Hydronephrosis right renal pelvis, Bifid.	114/68
16	62	Bifid Renal Pelvis.	160/75
17	34	Bifid Renal Pelvis Left. Contraction and elevation of Vesical orifice.	110/68
18	34	Bifid Left Ureter.	140/85
19	11	Ectopic Ureteral Orifice.	124/82
20	21	Anomalous Left Kidney Pelvis.	120/80
21	55	Congenital Ectopic right kidney.	104/60
22	21	Congenital Deformity Right Kidney. Small Congenital Kidney. Pyelitis left kidney.	110/90
23	32	Horseshoe Kidney right. Renal Calculus.	130/82
24	44	Double right kidney with large calculus. Bifid type of pelvis. Anomaly left kidney.	125/80
25	57	Double Kidney Right.	120/70
26	41	Congenital duplication left ureter. Left double kidney. Left ureterocele.	130/95
27	58	Double right kidney, recently found. Right Ureteral stone.	210/120
28	2	Double Left Kidney. Ectopic Left Ureter. Left Pyelonephrosis.	125/80

renal anomalies with or without stone or secondary infection. The patients were chosen because at the time of their first observation their blood pressures were normal—that is, under 140/90 mm. Hg. A review of these patients showed that none had developed blood pressure elevations in the interval, although many had had recurrent urinary infections or lithiasis and colic.

These findings are consistent with those of Ellis and Evans[21] who, in a series of 20 cases of renal dwarfism found 17 had hydronephrosis and dilatation of the ureter and bladder for long periods of time. Only two of these showed blood pressure elevation.

SUMMARY AND CONCLUSIONS

Observations on patients suffering from various renal anomalies reveal an incidence of arterial hypertension which is not greater than that occurring in apparently normal people. It is, therefore, suggested that renal anomalies do not lead *per se* to the development of arterial hypertension.

[16] Palmer, R. S., Chute, R., Crone, N. L., and Castleman, B.: The Renal Factor in Continued Arterial Hypertension not due to Glomerulonephritis as Revealed by Intravenous Pyelography. *N. Eng. J. Med.*, **223**:165, 1940.

[17] Schroeder, H. A., and Steele, J. M.: Abnormalities of the Urinary Track in "Essential Hypertension". *Proc. Soc. Exp. Biol. and Med.*, **39**:107, 1938.

[18] Maker, C. C., and Wosika, P. H.: Urologic Hypertension. *J. Urol.*, **41**:893, 1939.

[19] Palmer, R. S., Chute, R., Crone, N. L., and Castleman, B.: The Renal Factor in Continued Arterial Hypertension not due to Glomerulonephritis as Revealed by Intravenous Pyelography. *N. Eng. J. Med.*, **223**:165, 1940.

[20] Wishard, W. N.: Personal Communication to the Author.

[21] Ellis, A., and Evans, E.: Renal Dwarfism. *Quart. J. Med.*, **2**:231, 1933.

TABLE II

Diagnosis	Year	Age	Original Blood Pressure	Urinalysis Albumen	Urinalysis Red Cells White Cells	Present Blood Pressure	Current Findings
Left Kidney Abscess and Stone	1932	49	95/55	3	0 Loaded	126/72	Urinary fistula at point of drainage for eight years.
Right Hydronephrosis	1933	29	105/95	1	0 Loaded	114/72	Nephrectomy in 1937. Had full term pregnancy since then.
Left Hydronephrosis	1933	50	116/72	Trace	Occasional 0	128/92	Since removal of left Kidney stone in 1935 Symptom free.
Left Hydronephrosis	1934	40	135/85	Trace	0 0	134/92	Symptom free.
Right Hydronephrosis	1931	27	115/70	1	0 0	142/82	Stone removed from right Kidney in 1936.
Right Ureteral Dilatation and Hydronephrosis	1934	38	100/58	2	0 Loaded	108/66	Symptom free.
Right Hydronephrosis	1933	24	120/80	2	Loaded 0	116/86	Full term pregnancies 1935, 1938. Right Nephrectomy 1936.
Right Hydronephrosis with Secondary Infection	1934	31	115/95	1	0-Loaded Loaded	126/82	Hysterectomy in 1938.
Right Hydronephrosis	1932	29	90/50	0	0 10-Loaded	128/90	Symptom free.
Kinking of Right Ureter with Hydronephrosis. Pyelitis	1935	47	120/70	Trace	Loaded	132/76	Area clearance 35%. Headaches, Nocturia. Albumen 2.
Left Kidney Stone. Hydronephrosis	1932	31	132/90	Trace	0 Loaded	116/82	Stone removed from Left Kidney in 1934.
Bifid Ureter on Left. Pyelitis	1931	30	100/66	0	0 0	114/74	Has had two subsequent attacks of Pyelitis.
Pyelonephritis	1933	27	115/75	1	0 2-30	108/78	Area clearance 22%. Dependent edema.
Infected Hydronephrosis	1933	25	114/68	2	0 5-Loaded	106/68	Nocturia, Persistant back pain. Albumen 2+. 8-12 pus cells.
Polycystic Kidney on Left	1935	56	145/80	Trace	0 0-5	132/76	Left Nephrectomy 1938 Symptom free.
Aberrant vessel and 2 stones in Kidney	1935	39	115/90	Trace	0-40 10-35	128/70	Symptom free.
Left Ureteral Stricture and Hydronephrosis	1933	19	100/70	2	1-60 40-60	118/84	Symptom free.
Right Stone and Hydronephrosis	1935	33	120/68	Trace	0 5-25	128/78	Symptom free.
Perinephric abscess. Drained	1935	44	110/60	0	0 0-16	126/86	Gained 80 pounds since operation. Symptom free.
Congenital malformation of the Left Kidney. Pyelitis	1932	41	140/90	0	0 0-2	132/84	Symptom free.
Double Left Kidney with Ureter with Pyelitis	1934	30	100/75	1	0 0-Loaded	98/64	Symptom free.
Perinephric abscess. Drained	1933	22	128/84	Trace	0 2-10	136/88	Symptom free.
Left Hydronephrosis	1933	57	140/82	Trace	0 5-10	138/90	Recurrent Pyelitis. Vesico Vaginal fistula repaired 1937.
Duplication of Right Renal Pelvis and Ureter with recurrent stones	1934	58	120/82	Trace-1	5-Loaded 0-25	134/84	Has had 4 stones in right kidney. Still has colic.

It appears also that hydronephrosis, whether or not complicated by lithiasis or infection, does not lead to the production of hypertension. The coincidental presence of urological lesions might be expected in many patients with blood pressure elevation since arterial hypertension frequently has a prolonged course and approximately one-sixth of the adult population is subject to it. If there is an increased incidence of pyelographic abnormalities in patients with hypertension, it might better be explained by the assumption that the humoral substances responsible for hypertension may also act on the kidneys and ureters to produce these distorted shadows.

ANENT PRONUNCIATION OF MEDICAL WORDS*

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This concerns not what is said, but how it is said. The former certainly is the more important; but the latter, if improperly executed, distracts one's attention—as an otherwise perfect piano rendition may be marred by one discordant note.

In attending medical meetings the writer has become impressed with what appears to be a surprising disregard by the average doctor for the correct pronunciation of commonly used medical and scientific words. A presentation may be so interesting and illuminating—the listener so absorbed by what he hears—that he never once is aware he listens to "words." Instead, pictures and thoughts reach his sensorium, and he is attentive and comprehending. But let the speaker say *ecze'ma* instead of *ec'zema*, and immediately the listener's attention is diverted. So far as we are concerned, fully two sentences must pass unheard, while we wonder why the gentleman didn't bother to learn the correct pronunciation for the word. Moreover, the prestige of the speaker as an authority is, from that point on, in jeopardy. It seems foolish and quite unnecessary to lose one's audience for a reason so easily avoidable.

CAUSES OF MISPRONUNCIATION

Several explanations suggest themselves as possible causes of mispronunciation: indifference, ignorance, and common usage. The last mentioned is probably the most important; and, when this is the cause, even a visit to the dictionary may be of but little help in giving an answer. One may find the correct form together with two or three others dictated by common usage alone. Consider, for example, the word "gynecology." One must choose from among three or four pronunciations, all apparently acceptable. Such disorder no doubt contributes to mispronunciation.

In the matter of indifference, incorrect pronunciation frequently arises from slovenly enunciation. For example, speakers often say *lab'-ra-to-ry* with four syllables, while the word has five and should be pronounced *lab'-o-ra-to-ry*.

The term "correct pronunciation" is not entirely self-explanatory, and doubtless many who use the expression would be unable clearly to define it. Probably it would be safe to say, however, that any given word is pronounced correctly if used in one particular form by a sufficient number of cultivated speakers. Under such conditions an acceptable standard of correct pronunciation may be said to be that which is in common use by cultured and educated people to whom the language is vernacular.

In scientific and medical speech, as in everyday English, styles of pronunciation change. Some members of the old school still say *gooms* instead of *gums* and *wownd* instead of *wound*. Others still use the suffix *-etis* rather than *-itis*: appendi-*cetis*, tonsill-*etis*, ar-*thretis*, and so on. At one time such pronunciations were acceptable; now they are simply conspicuous.

In attempting to find an authoritative source of information on correct pronunciation it soon became evident that, for scientific words, there is no large exhaustive work such as there is for ordinary English. Therefore, for the purposes of this discussion, the standard medical dictionaries are presumed to be authorities, together with the standard general dictionaries in some instances. For the most part these are in close agreement with each other. As a rule where several pronunciations are in common use, each is given, and if one is more desirable it is so stated.

GROUP DIVISION OF MISPRONOUNCED WORDS

Words commonly mispronounced may be divided, for convenience, into two groups: those over which there is general agreement among authorities on one pronunciation, and those which have two or more acceptable forms, one or another of which might be stated to be preferable.

In the first group we find such words as the following. How would you pronounce them?

Adult	Ramus	Maxilla
Research	Nomenclature	Axilla
Cocci	Trichomonas	Protein
Chiropodist	Duodenum	Discharge
Abdomen	Ouabain	Epiphyseal
Autopsy	Endocrine	

All of us have heard one or more of these words mispronounced. Indeed, it is likely that not one physician in a hundred pronounces all of them correctly. Yet the dictionaries agree on but one correct form:

a-dult'
re-search'
cok'-si (not cok'-ki)
ki-ropodist (not sheer-opodist)
abdo'-men (not ab'-domen)
au'-topsy (the first syllable is definitely accented)
ray'-mus (the *a* is long as in *date*)
no'-menclature (not nomen'-clature)
trikom'-onas (the accent is on the second syllable—believe it or not)
duode'-num (not duod'-enum)
wah'-bah-in (three syllables, not two)
en'-docrine (not en'-docrene)
maxil'-la (not max'-illa)
axil'-la (not ax'-illa)
pro'-te-in (three syllables, not two)

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dis-charge′ (not dis′-charge)
epifiz′-eal (not epifi-se′-al)

SOME MEDICAL WORDS FREQUENTLY USED

There is an interesting group of words that we use often in our daily conversation which is made up principally of proper names. Included in this group are Wassermann, Weil, Widal, Wertheim, and so on. The question arises as to whether these names should be pronounced as the Germans pronounce them, or if they may be properly regarded as having become Anglicized. Should one say *Wassermann* or *Vahsermahn*, *Wile* or *Vile*, *Wedal* or *Vedal*, *Wertheim* or *Vertheim?* It is seldom one hears a doctor use the German form and yet, somehow, it seems proper to do so. No musician in speaking of Wagner would think of saying anything save *Vahgner*. Why shouldn't we do the same with the others? Yet, if we are to be guided by common usage we should drop the German form.

A group of related words commonly mispronounced is that which identifies the barbituric acid derivatives, including the many proprietaries which belong to that family of drugs: barbital, phenobarbital, nembutal, amytal, seconal, etc. It is in the last syllable that mispronunciations occur. As in the case of Widal, the final *al* has the same sound as the first syllable in *tallow*, not as it sounds in the word *tall*. But here again we are criticizing widespread usage. In fact, correctness in the use of these words would likely disconcert a listener for the reason that, to the majority of an audience, the words apparently would be mispronounced; the bizarre is arresting whether it be correct or incorrect.

ALTERNATIVE PRONUNCIATIONS

There are a few commonly used words for which the dictionaries give more than one acceptable form of pronunciation. Such a word is "gynecology." Stedman, in his 1928 edition, pronounced it *ji-*, with the *i* long as in pine, while the present 1939 edition changes to a short *i*, as in pin. Dorland conforms to the latter, while both agree on the *j* sound rather than a hard *g*. Webster allows for both the long and short *i* and adds a third, *gi-*, the hard *g* and long *i*. And finally, common usage provides for a fourth—the hard *g* and short *i*. Dr. Morris Fishbein, in his fascinating little book, "Doctors and Specialists," which so cleverly caricatures the medical profession, expresses it thusly: "The worst thing about the gynecologist is pronunciation. He is pronounced variously, *gyne*, *ginni*, *jyni*, and *jinni*, any of which is right or wrong, depending on how he happens to feel that day." The writer is inclined to subscribe to this viewpoint.

"Iodine" is another word over which there is no complete agreement. The last syllable may be *-din*, *-dine*, or *-dene*. Stedman gives the last two. Dorland gives but one form, *-din*. Webster accepts all three, but states that among chemists the preferred form is *-dene*.

Cadaver in both Stedman and Dorland has a short *a* in the second syllable, as in *have*, while Webster gives both the long and short *a* as correct. It has seemed to the writer that most doctors use the short *a*. Hygiene has more than one correct form. One authority says *hi′-gene* while another says *hi′-ge-ene* with three syllables. Calamine may be pronounced with either a long or a short *i*.

Stedman pronounces "respiratory" with the second syllable accented thus: *respi′-ratory*. Webster prefers this, but lists as a second choice, *res′-piratory*. Dorland gives but one form, *res′-piratory*. In this particular instance, it is strange that any pronunciation but that used by Stedman is accepted when one considers a similar word, *expiratory*, over which there is no disagreement by any dictionary. All agree the accent is on the second syllable. Both words have the same Latin derivation; so that if *expi′-ratory* is correct, then *respi′-ratory* also is correct.

OTHER EXAMPLES

Following are some additional words commonly mispronounced, but which have only one correct form:

	Don't Say	*Say*
angina	angi′-na	an′-gina
ascaris	ascar′-is	as′-caris
raphe	ra-phe′	ra′-phe
umbilicus	umbil′-icus	umbili′-cus
tricophyton	tricophy′-ton	tricoph′-yton
acetyl	ase′-tyl	as′-etyl
foramen	forah′-men (short *a*)	fora′-men (long *a*)
prosthesis	prosthe′-sis	pros′-thesis
tinnitus	tin′-itus	tini′-tus
eustachian	eustash′-ian	eustak′-ian
vitiligo	vitile′-go	vitili′-go (long *i*)
proteid	pro′-teid	pro′-te-id
rigor	rig′-or	ri′-gor (long *i*)
opisthotonos	opisthoton′-us	opisthot′-onos
cerebral	cere′-bral	cer′-ebral
caffeine	caf′-eine	ca′-fe-ene (three syllables)
paresis	pare′-sis	par′-esis
data	datta	da′-ta (long *a*)
status	stattus	sta′-tus (long *a*)

IN CONCLUSION

The writer feels that the correct pronunciation of words is not of so great importance if an incorrect form is in common use. For example: caffeine, trichomonas, the barbitals, and the German proper names. One is then apt to pay but little attention to it. But it is definitely disconcerting to the average listener when such words as eczema, abdomen, umbilicus, adult, research, and so on, are mispronounced.

The use of scientific words is essential in the discussion of medical subjects. Such words are our language, just as surely as are any other. We are among the most highly educated of all classes of men and women. My plea is that we take as much care with our medical language as we do with our ordinary speech—nay, a little more!

1904 FRANKLIN STREET.

Medicine Today

"Be not the first by whom the new are tried, nor yet the last to lay the old aside."

The expensive **"glass boot" treatment** of vascular lesions of the leg and foot may be approximated by obliterating the leg artery with a sphygmomanometer. Obliterate two minutes; then release pressure three minutes; then elevate leg one minute. Repeat this cycle five times to constitute a day's treatment.

Robert Hoffman, M.D.

* * *

"In vivo" experiments have shown that animals inoculated with staphylococcus aureus showed fewer survivors when treated with sulfanilamide and roentgen rays combined than with either the drug or roentgen rays alone. It has been noted clinically that patients with infections treated coincidentally with roentgen rays and sulfanilamide have not responded as well as similar patients treated with one or the other.—R. Flocks, O. N. Fellowes, and H. D. Kerr, *Am. Jour. Roent. and Rad. Ther.*, 1940, 44:1.

Eugene C. Murphy, M.D.

* * *

"It seems to me that **we who teach surgery to medical students** should unite in an effort to eliminate the term 'minor surgery' from our nomenclature. It is a useless, dangerous term, liable at some time in the intern's career, or even while he is engaged in private practice, to endanger the life of a patient by thinking that any condition requiring surgical treatment can be regarded as 'minor.' You know, and so do I, that such a designation is unsound. It belittles the art of surgery and gives the student an erroneous conception of its practice. We should not stand by and allow such terminology to be used in our writing and teaching."—Editorial from *Surgery*.

* * *

Treatment of obstetric fractures of femur.—For obstetric fractures of the femur Pavlik advises reduction of the fracture and retention of the limb in abduction by means of a plaster of paris cast symmetrically applied to both lower extremities in a similar manner to the application of a cast for the treatment of congenitally dislocated hips. The treatment has the advantage of simplicity. It does not require hospitalization. During the first month the plaster is changed each week; the final bandage is worn for one month, and treatment is usually terminated at the end of two months, at which time the callus is sufficiently strong. This method has been used for the past three years. In each case the fragments have healed satisfactorily without appreciable shortening of the limb.—Kuhns, et al.—Progress in Orthopedic Surgery.

Walter H. Baker, M.D.

* * *

The first great attack against disease was made by Pasteur and Koch, who established the science of bacteriology. Much has been learned about disease from the bacteriological investigations. Many methods of cure and prevention have been based on knowledge that they established. The science of bacteriology has progressed by leaps and bounds. All countries have participated in its pursuit. In the last few years another enemy of mankind has appeared on the scene as the role of the causation of disease. In fact, one of these was even known to Pasteur although he had little conception as to what its true nature was. These are the filterable viruses, organisms so small that they pass through filters which hold back ordinary bacteria. Some of these diseases are rare, such as poliomyelitis, rabies, and encephalitis. Others are extremely common, such as the common cold, certain forms of herpes, common warts, and during the time of epidemics, pox diseases and influenza. These filterable viruses are found to attack not only human beings, but one of the earliest studied was the mosaic disease of tobacco. They are opening up a new field of scientific endeavor and much work is being done upon them at the present time and, no doubt, the means for combatting them will be found and placed on as sure a basis as has been established for the bacterial diseases.

Marcus W. Lyon, Jr.

* * *

The recent epidemic of poliomyelitis has demonstrated the desirability of understanding the indication for and use of the mechanical respirator. This problem is ably discussed by James L. Wilson, M.D., in the *Journal of Pediatrics*, volume 16, number 4, page 462. He emphasizes that the respirator will aid only when there is a paralysis of the intercostal muscles, of the diaphragm, or in the rare instances where there is a hypo-function, not a dysfunction, of the respiratory centers.

It will not help when pharyngeal paralysis obstructs respiration, when the respiratory centers are irregularly active and produce something like an auricular fibrillation of respiration, or when respiratory failure is secondary to circulatory collapse and tachycardia. It will not help therefore in most cases of "bulbar" poliomyelitis.

Poliomyelitis can prevent efficient respiration in three ways:

1. By actual paralysis of the primary respiratory muscles, the intercostals and the diaphragm, due to involvement of the anterior horn cells of the cord.

2. By disturbance of the nerve centers in the medulla or bulb which presumably control the rate, rhythm, and depth of respiration.

3. By the collection of mucus or vomitus around the glottis in patients with paralysis of the pharynx, causing constantly interrupted inspira-

tory efforts resulting in shallow, irregular, and ineffective respiration.

The early evidences of paralysis of the intercostal muscles are wakefulness, anxiety, restlessness, an increase in respiratory rate, a slight respiratory grunt, and disinclination to talk. Paralysis of both shoulders is so frequently associated with paralysis of intercostal muscles that with any evidence of respiratory weakness or the paralysis of both shoulders in the acute stages of disease, every effort should be made to move the patient to a respirator. Care must be taken in removing the patient from the respirator too soon.

Milo K. Miller, M.D.

* * *

As I Remember Him written by the late Hans Zinsser, one of the world's outstanding bacteriologists, during the two years when he knew he was dying of leukemia, is one of the most illuminating and absorbing of the recent modern biographies.

G. E. Gates, M.D.

CASE REPORT*

C. L. WILLIAMS, M.D.
P. D. WILLIAMS, M.D.
and
E. B. JEWELL, M.D.
LOGANSPORT

In neuropsychiatry, one is frequently faced with cases of gross abnormal behavior, delirium, hyperactivity, clouding of consciousness, and fever, only to be perplexed at autopsy by the meager pathological findings on which to explain the antemortem condition. Such perplexity confronted us in the following case.

T. W. V., a white married female, 37 years of age, and with a high school education, was admitted December 15, 1939.

The onset of the present illness was acute on November 28, 1939, and was characterized by a catatonic excitement with attitudinizing, overactivity and clang association, but no distractibility. She was definitely hallucinated in the auditory sphere and probably had visual hallucinations.

Family history was non-informing except that one sister had been in a mental hospital, diagnosed schizophrenia, but apparently had made a recovery.

The past medical history revealed that some twelve years previously there had been a pyelonephrosis followed by instrumentation from time to time with periodic manifestations of urinary symptoms. Recently the patient had been studied at a clinic where the physical findings and serology were negative and it was felt that the patient was a psychoneurotic. Prior to the present illness the patient became seclusive, staying at home most of the time. She became over religious and spent much time listening to radio talks on religion and reading the Bible. There was some indication of suspiciousness of others and there were transient disturbed spells.

The patient was admitted to a general hospital sixteen days prior to admission at Logansport State Hospital. Upon admission, she had a temperature which was felt to be due to dehydration. Following clysis the temperature was practically normal for six days. December 6, 1939, the temperature went up to 103 degrees and remained thereabouts. This was accompanied by clouding of consciousness, restlessness requiring restraint, and only a few lucid intervals.

Upon admission here to the state hospital the patient was out of contact with her environment so that a complete mental examination could not be done. She was restless, resistive, displayed facial grimaces, and continuously picked at the bed clothes. She took fluids and food quite well so that it was only occasionally necessary to use mechanical feeding to supplement the fluid intake.

The physical examination showed a well developed female of fair nutrition, with pale mucous membranes. There was a temperature continuously above 101.6 degrees and usually in the vicinity of 103 degrees. There was a papular eruption over the back, shoulders and abdomen which appeared of a medical nature, and there were numerous minor bruises over the arms and legs. Ears, nose and throat were negative. Pupils were equal and reacted to light and accommodation. The fundus was negative, and no photophobia was present. Neck negative. The lungs were clear. Pulse 120, weak in character, while the blood pressure was 140/82. No murmurs elicited. The gastro-intestinal system, liver and spleen were negative. There was some tenderness over the left kidney area. Kernig and Brudzinski signs were negative, and all deep reflexes were practically normal, and equal bilaterally. Toe reversal signs were negative.

Laboratory: Urine analysis showed a trace of albumin, and one plus to two plus pus cells. W.B.C. varied from 8,300 to 13,300, the differential polys 69% to 73%, eosinophiles 1% to 3%, small lymphocytes 8% to 25% and large lymphocytes 1% to 8%. Hemoglobin 13.6 grams and the red cells ap-

* From the Logansport State Hospital.

peared normal. Blood Kline and Mazzini negative. Spinal fluid was clear and colorless, 2 cells per cu. mm, globulin negative, glucose 85 mgms. Agglutination tests for typhoid fever, paratyphoid A, paratyphoid B, undulant fever, and tularemia were all negative.

On December 25, 1939, the patient's temperature rose to 106.4 degrees, and there were coarse tremors of the hands and face which appeared to increase to a generalized muscular twitching. Following this the patient became lucid, was oriented and cooperative in spite of the high temperature. Cyanosis of the lips and fingers deepened and the patient died.

At autopsy, the brain appeared to be congested over both frontal lobes and to be edematous. There was a spot of purulent exudate about the size of a quarter, about one-half inch lateral to the saggital fissure over the right Rolandic area. The pia-arachnoid was markedly congested and thickened. In the microscopic study of this area, the arachnoid was not well preserved in the fixing and staining process so that only small fragments were present in the slide. All the blood vessels of the meninges were packed with blood. There was insufficient arachnoid present to determine whether or not pus cells had accumulated, and whether there were connective tissue responses of an inflammatory nature. Two instances were found of leukocytes migrating through the vessel walls. A few accumulations of free round cells were found which appeared to be in the arachnoid but they were not polymorphonuclear leukocytes.

The cortex in this area showed practically all the blood vessels were congested with blood cells. Each vessel was surrounded with a clear halo which would appear to indicate edema. There was no perivascular cuffing of the vessels with inflammatory cells. The architecture of the cortex appears fairly well preserved except that layers 3, 4, and 5 are not so well differentiated. There were no glial responses to inflammation. Throughout the cortex several small circular areas were found that did not take the stain well and appeared as light spots or "paled areas." These areas were more apparent with the haemotoxylineosin stain than with the toluidin blue and Bielschowsky stains. The glial cells and ganglion cells took the stain lighter in these areas and the various elements of the cell appeared more homogenous. The cells in these areas showed severe changes of degeneration.

The ganglion cells as a rule had halos around them. The majority of the ganglion cells showed changes from the normal in that the nuclei had lost their nucleoli. The nuclear membrane was indistinct and the protoplasm was lighter than normal. These changes resembled somewhat the "severe cell change" of Nissl.

Sectioning of the cerebral hemispheres at the optic chiasma and the mamillary bodies showed the cut surfaces to have many fine pinkish spots which were small vessels congested with blood. There were no *etats lacunaires*. The various nuclei and fiber tracts appear to have their normal relationship. The microscopic section of the cornu ammonis showed the majority of the blood vessels to be congested with blood cells. One or two areas were found which showed an increase in the number of glial cells (proliferation). There were two or three "paled areas" noted in the section. The disintegration of the nerve cells was less marked in this section than in the first section.

Further sectioning of the cerebral hemispheres showed the congestion of the blood vessels with blood, but no other gross pathological abnormalities. Microscopic section of the frontal lobes showed in comparison the blood vessels to be less congested than in the other two microscopic sections. There were no areas of glial proliferation noted and only one "paled area" was found. The architectural pattern in the frontal region of the cerebral cortex was more disturbed so that the layers were quite mixed and difficult to make out.

The cerebellum showed no gross abnormalities on sectioning. The microscopic section taken through the dentate nucleus showed the architecture of the cerebellum to be well preserved, and the blood vessels apparently not congested. There were no other signs of inflammatory reaction. The ganglion cells of the dentate nucleus appeared practically normal, only a few showing degeneration.

The sectioning of the medulla oblongata showed the same congestion of the blood vessels as had previously been noted. There were no other gross pathological abnormalities elicited.

The lungs showed no gross pathological abnormalities. The heart weighed 250 grams, and showed only a thickened mitral valve and small atheromatous plaques in the aorta. The microscopic picture was non-informing.

The liver appeared to be pushed rather high into the right chest and did not show any gross change. The microscopic section showed the cords of the liver cells to be rather closely packed together and took the stain lightly. There was a rather generalized fatty infiltration of the cells in the section, this not being localized to any particular part of the lobule. There were no inflammatory cells noted in the section.

The gall bladder, stomach and intestines and appendix showed no gross changes. Peyer's patches were not inflamed. The spleen to gross examination showed no particular abnormality. On microscopic examination there was a marked decrease in the lymphoid elements in the spleen and only one Malpighian corpuscle was seen, and it had a marked decrease of its lymphoid content. The right kidney weighed 140 grams, while the left kidney weighed 130 grams. The left was paler than normal. There were no evidences on sectioning of inflammatory reactions, no evidences of pyelonephrosis which the patient had previously suffered. The microscopic examination of the kidney showed the cells in the collecting tubules and convoluted tubules to be degenerated. The inner margin (tubular) of the protoplasm was frayed out and indistinct. Other areas were found where the cells were swollen and

pale. The glomeruli were shrunken in their spaces. There were no areas of congestion and only one area that showed a collection of fibroblasts. The fallopian tubes and ovaries and pancreas showed no gross abnormalities. There was a pedunculated tumor attached to the right broad ligament which on sectioning proved to be a leiomyofibroma which was benign.

From the clinical standpoint it would have appeared that there would have been plenty of pathology in the postmortem to adequately account for this patient's death. However, the study of the postmortem revealed very few things of sufficient seriousness to cause death. Among the diagnoses considered during the illness were pyelonephrosis, typhoid fever, brucellosis and meningitis. All of the first named were gradually ruled out by laboratory examinations, and the diagnosis of meningitis could not be definitely established due to the meager number of clinical signs. At the postmortem meningoencephalitis was considered, due to the swollen and edematous condition of the brain and to the fibrotic reaction in the arachnoid and the collection of the purulent exudate at the vertex over the Rolandic area. Yet, some of the findings of encephalitis were not present such as the glial reaction and perivascular cuffing with inflammatory cells. The only evidences found in the microscopic examination on which to base the diagnosis of encephalitis were the disturbances in the architectural pattern of the cortex, the edema, the "paled areas" and "severe cell changes." However, these changes with certain other manifestations could appear in other pathological conditions of the brain. Considering first the rather bizarre clinical picture, second, the purulent exudate at the vertex, third, the microscopic changes found in the brain, and fourth, the toxic action to the kidneys, spleen and liver, we are inclined to believe that this was a case of meningo-encephalitis of undetermined etiology.

ABSTRACT

TELLS HOW TO AVOID HUGE COSTS OF TUBERCULOSIS CARE IN ARMY

In order to avoid a repetition of the huge costs unnecessarily incurred in the first World War for the care of tuberculosis cases in our Army, x-ray pictures of the chest showing absence of tuberculous infection should be the criterion for acceptance in the event of mobilization for war today, and they should be made and reported when the candidate is first examined, "before he has spent a night away from his own roof," Ramsay Spillman, M.D., New York, maintains in *The Journal of the American Medical Association* for October 19.

"Tuberculosis during and after the World War has cost approximately $860,000,000 to date in compensation, vocational training and insurance," he declares. "This is entirely aside from the cost of constructing and maintaining hospitals for tuberculosis and providing them with medical staffs. He sets this figure at $100,000,000.

Much of this cost was incurred because of failure to detect evidence of the disease soon enough in draf'ted men. The expense of taking one man with tuberculosis into the army, Dr. Spillman estimates, is probably around $10,000, certainly not less than $7,500, a figure to which can be added at least $50 a month for the rest of the man's life and compensation benefits for his dependents after his death.

In the World War men were accepted for training who passed a personal physical examination without evidence of tuberculosis. Physical diagnosis has been shown by evidence, much of which has accumulated since the War, to be much less reliable than radiography (the taking of x-ray pictures). While the expense of radiography was considered too high to be practical at the time of the War, its proved advantages over physical examination make its cost negligible in comparison with the saving it would effect. Furthermore, the shortage of x-ray specialists which made routine radiography impracticable at the time of the War no longer exists.

Discussing the huge amount of compensation paid out to men manifestly tuberculous at the time they were sent to camp, Dr. Spillman points out that in 1917 local draft boards were supposed to reject draftees with disqualifying defects before sending the candidates to army camps. Yet in the reexamination of men sent to camps, large numbers were found by chest experts to be tuberculous. Some of these men had been sent by the local draft boards on the assumption that a change of climate would benefit their tuberculosis!

At camp the recruits were given injections of typhoid vaccine, which in a great many cases resulted in a sore arm. Soon afterward they were examined for tuberculosis. Many of those rejected because of tuberculosis had not known until then that they had the disease. "By the simplest association of ideas," the author points out, "many of them believed that what made the arm sore was responsible for the tuberculosis. But whether they first learned that they had tuberculosis, with or without the belief that it was the 'T. P. shot' that produced it, or whether they had come to the cantonment for the change of climate on the prescription of the draft board physician, every one of these rejectees was able to present evidence, acceptable under the law, that dictated the course of the War Risk Insurance rating doctors, of whom I was one, that their tuberculosis had been aggravated by their few days at camp, and they went on the payroll from that time on for the aggravation of the preexisting disease, just the same as if they had incurred it at camp."

To avoid a repetition of this situation, Dr. Spillman recommends that the x-ray picture "should be made and reported before the recruit has spent a night away from his own roof."

He declares that examination of the chest with the fluoroscope, an x-ray machine which shows on a screen the lungs and heart in action as contrasted with the still view which is provided by an x-ray film, is entirely unsatisfactory as a substitute for radiography. "Fluoroscopy gives no permanent record," he says, "it is highly subjective and it introduces the personal equation."

The author points out that while his paper emphasizes the financial cost of taking tuberculous men into the army, there are other disadvantages, such as the tendency of strenuous exertion to activate latent tuberculosis and the infection of adults in close contact with tuberculous persons, a concept not understood in 1917.

THE JOURNAL
OF THE
INDIANA STATE MEDICAL ASSOCIATION
DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA
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NOVEMBER, 1940

Editorials

PLATFORM OF THE AMERICAN MEDICAL ASSOCIATION

The American Medical Association advocates:

1. The establishment of an agency of federal government under which shall be coordinated and administered all medical and health functions of the federal government exclusive of those of the Army and Navy.

2. The allotment of such funds as the Congress may make available to any state in actual need for the prevention of disease, the promotion of health and the care of the sick on proof of such need.

3. The principle that the care of the public health and the provision of medical service to the sick is primarily a local responsibility.

4. The development of a mechanism for meeting the needs of expansion of preventive medical services with local determination of needs and local control of administration.

5. The extension of medical care for the indigent and the medically indigent with local determination of needs and local control of administration.

6. In the extension of medical services to all the people, the utmost utilization of qualified medical and hospital facilities already established.

7. The continued development of the private practice of medicine, subject to such changes as may be necessary to maintain the quality of medical services and to increase their availability.

8. Expansion of public health and medical services consistent with the American System of democracy.

DR. VERNE K. HARVEY

Several years ago, along with a change in the political picture in Indiana, there was a reorganization of the Indiana State Board of Health. Governor Paul McNutt did not bring this about without first consulting the official family of the Indiana State Medical Association, and his suggestions were not wholly political; rather they were to the effect that he wanted certain changes and wished assistance in accomplishing them.

As was natural, his motives were misunderstood in many quarters, and in particular one John H. Kingsbury, former executive secretary of the Milbank Foundation and a frank advocate of socialized, regimented medicine, took advantage of the situation and issued statements through the lay press to the effect that Indiana no longer had a state board of health!

In THE JOURNAL for December, 1933, the press report of the comment of Mr. Kingsbury is quite fully quoted and we wish to repeat one statement: ". . . . This means that many counties, cities, and even whole states have been obliged to abandon vital health services. This is notably true in the states of New Mexico, the Dakotas, *and of Indiana, where the State Department of Health has been virtually abandoned.*" (Italics ours.) We were considerably aroused at the time and wrote an editorial in which we stated that Mr. Kingsbury was a monumental liar because Indiana had *not* abandoned her board of health and had no intention of doing so; rather she was attempting to put the organization on a firmer foundation so that it could carry on as never before in its history. This has been accomplished. The Indiana State Board of Health ranks at the top. Its personnel scarcely can be equalled elsewhere in similar organizations. Certainly its secretary and executive officer, Dr. Verne K. Harvey, ranks at the peak of the list.

Whatever misgivings there may have been at the beginning of the new regime have long since disappeared, for soon after Verne Harvey "took over" our minds were at rest and the members of the medical profession in Hoosierland ceased to wonder what was going on. They soon learned that Verne Harvey had an objective and that the objective was to give Indiana a health administration that was tops. Soon the objective was reached.

During the past seven years many notable achievements have been accomplished, the most spectacular of which came at the time of the Ohio River flood. Emergencies arose daily, only to be met and solved. Every department of the State Board of Health was called upon and rendered yeoman service to the extent that the lives and health of residents in the flooded areas were conserved to the highest degree.

Verne Harvey does not become excited in emergencies. When pestilence of any sort seems about to enter Indiana, he is sane and calm about it,

quietly considering how such a condition may best be met. At such times his pipe goes into increased action, he talks even less than usual, but all the while he is thinking and planning and finally comes up with the answer.

Now Dr. Harvey has accepted a post as chief medical officer of the United States Civil Service Board of Commissioners at Washington, D. C., and has resigned his post as director of the Indiana State Board of Health. Before this JOURNAL comes from press, Dr. Harvey will be in Washington and beginning his new duties.

Through the years we have enjoyed knowing Verne Harvey. It has been a pleasure to work with him and we at this time wish to acknowledge the many times he has assisted us in our work with THE JOURNAL. We wish for him continued success in his new work, and trust that he may be able to organize that work to the degree that politics has little or no part in it. Verne Harvey definitely is not a politician, nor does he want to become a politician. We feel secure in the statement that what he most likes is a position in which he is called upon to exercise the judgment that can come only from a thorough understanding of the work in which he is engaged. Verne Harvey has that understanding, hence we are sure that he will carry on in Washington as he did in Indiana.

THE JOURNAL joins with his thousands of friends in wishing for him the greatest of success.

TRAILER CAMP TYPHOID

It seems that just about the time we of the medical profession begin to feel that we have extinguished one of the diseases which has taken a great toll in human lives, there comes along some element to rekindle the fire. In this particular instance we are referring to the trailer camp typhoid fever infections which seem to be all too common.

Not long ago a situation of the kind arose in northeastern Indiana, and numerous cases of typhoid fever were traced directly to insanitary conditions in a trailer camp. Our health authorities immediately went into action and in a short time these dangerous conditions were eliminated.

The *New York State Journal of Medicine* for September fifteenth contained an article in which Lembcke and Rafle described such an outbreak of this disease, this time traceable to a New York state trailer camp. Following the report that there were several cases of typhoid in this camp, the health authorities immediately investigated the matter and found that in a group of twenty-two individuals who had been touring the country via motor cars, there were eight cases of the disease. The probable source of infection finally was traced to a camp at Oswego, New York, and the investigation thus centered at that point. It was ascertained that some of the toilets were out of order and that the water supply was low during the time that these particular tourists were in that camp. It was found that a camp employee had been ill with a fever of unknown origin, and in a few days a diagnosis of typhoid fever was made. It also was found that several other cases about the state gave a history of having stopped for a night or two at this same camp. In all, eighteen cases of typhoid were traced directly to this source of infection.

It is interesting to note the places of permanent residence of these individuals for they indicate how widespread this type of infection may become. Their homes were in New York, Pennsylvania, Michigan, Rhode Island, Louisiana, and Texas.

Patrons of the camp were supplied with drinking water that was unfiltered and unchlorinated and which came from fissured limestone rock. Further investigation showed that during the construction of this camp there was considerable drilling and blasting as a result of which the shore waters of Lake Ontario, some 250 feet distant, were rendered very turbid, but this was not reported to the health authorities. Numerous other findings made it definite that the water supply in this camp was the source of many cases of typhoid.

There is no doubt that there have been many other typhoid infections throughout the country among the ever-increasing number of motor tourists, and such conditions demand increased activity on the part of our health departments. Time was, and not so long ago, when a trailer camp meant only a more or less shady spot at the side of the road with perhaps a small comissary, one or two buildings of the Chick Sales variety, and a pipe driven into the ground until water was "struck." These conditions are no longer true in most states. The camps are thoroughly checked and, in many instances, permits are refused until insanitary conditions are corrected.

Along with numerous other institutions about the country, trailer camps should be compelled to have an analysis of their water supply at regular intervals. Steps should be taken so that intestinal disorders of any sort in camp patrons or employees may be investigated immediately. Typhoid fever is readily carried from place to place and unless we safeguard the health of these camp patrons we may find this disease firmly entrenched in many sections of the country.

There remains another lesson to be gathered from situations such as described above. That is the lesson of immunization. A family that can afford a motor car of sufficient efficiency to cart them over the country can well afford typhoid immunization; in the long run, it will save them plenty of money.

THE 1940 CENSUS

Every ten years Uncle Sam gets curious and wants to know how many members there are in his large and growing family. In recent years he has wanted to know about lots of other things, some of which aroused said family to the point that he

ceased being *too* curious! However, the facts elicited from this every-ten-year census gives us plenty to think about. Every city, town and village throughout the country has one or more "population rivals" and each will boast that in another ten years it will be ahead of its contestant in population. Thus it is that the recent release of certain population figures affords an interesting study for most of us.

The total population of the country, as of April 1, 1940, was 131,408,881, an increase of seven per cent over 1930. This increase is, however, less than one-half that shown in any previous decade. Immigration restrictions may be considered the greatest factor in this decrease. However, the decrease in our birth rate is to be considered.

Everybody, of course, wants to know which is the fastest growing city in the country, and which is the fastest growing state. Formerly Los Angeles and Detroit seemed to have this award as to cities, while states in the Middle West out-stepped their neighbors on either side. But this year the city palm goes to the City of Washington which had an increase of 36.2 per cent. Florida leads the states with an increase of 27.9 per cent and is followed in turn by New Mexico and California.

Washington's great increase is no doubt due to the influx of "payrollers". (Some have been unkind enough to say that it is due to the New Deal but since The Journal is not in politics, we shall not comment on that phase!) It is, of course, true that the many new "departments" added to our Federal Government call for thousands of new employees, most of whom choose the Capital City as their home.

The socalled "sunshine states" come in for sizable gains in populations, three of them—Florida, Arizona and California—ranging from 27.9 to 21.6 per cent. It is easy to understand why this is so. Americans have become vacation-minded; they travel the entire country and it is quite conceivable that many of them, looking for a home after their retirement, choose one of the warmer climates of the country. The mountain states of the West also showed an increase in population while those in the "dust bowl" areas sharply declined. It is thought that many former residents of this "dust bowl" had moved into the mountain states.

Now as to Indiana: Her net gain during the past ten years was 5.5 per cent; in the preceding decade she gained 10.5 per cent. Indiana now becomes twelfth in the list of states based on population. Ten years ago she ranked eleventh; this year she exchanges places with North Carolina. Vermont, Delaware, Wyoming and Nevada bring up the rear in that order.

Final official population figures, state by state, will be available about November first.

All reports and notes from the French Lick convention will be printed in the December issue.

IT CAN BE DONE!

For several decades the medical profession of Indiana has been endeavoring to devise some plan by which violations of the laws relating to the practice of the healing arts may be checked. The Indiana State Board of Medical Registration and Examination has discussed this matter ever since its organization, more than forty years ago. No matter what plans were devised, it was found that efficient enforcement would necessitate the employment of a trained investigator which, of course, would cost money. The Board never has been able to convince the State Budget group of this and, hence, there has been no appropriation for the purpose—also no investigator.

A little while ago the Indianapolis Better Business Bureau, under the able direction of Toner Overley, became interested in the matter. Several years ago the Bureau, at considerable cost, investigated a notorious "cancer hospital," in Indianapolis, their check resulting in the filing of charges before the Medical Board, and a request for the revocation of the medical license of that place. The hearing in this case occupied the time of the Board for several days because the Bureau presented its case very thoroughly. The license of Dr. Charles C. Root, who operated the place, was revoked as the result of the evidence presented.

During the past few months the Indianapolis Better Business Bureau has evinced a renewed interest in medical law violations. The Bureau has successfully prosecuted two Richmond drugless healers, one of whom moved over to Indianapolis following the Richmond conviction, only to be apprehended in Indianapolis. The newspapers report that this chap went to Indianapolis following the revocation of the license of one Hiel E. Crum, so that he might make available the invention of Crum, known as an "etherator." He now faces an injunction suit under the 1927 amendment of the medical law.

The Bureau's action against Crum affords full proof of the necessity for trained investigators in the handling of such matters. The evidence before the Medical Board was so clean cut that the vote in favor of revocation of Crum's license was unanimous.

The Bureau next checked on the "hot hands" operations of a group down Martinsville-way. Don Turk, staff correspondent of the Indianapolis *Star*, writes entertainingly in that paper (issue of September fourth) as to his observations of what went on in this "hot hands" clinic, said to have been operated by one George E. Clawson and his four assistants. The story breezily recites that Clawson, once an interurban motorman, discovered that he had "hot hands" and proceeded to capitalize on that discovery. His business increased to such an extent that he needed help, so he "transferred" some of his magic powers to an assistant. Later he added three more assistants, thus having a five-man clinic. Don Turk says that the patients were

treated with their clothes on, receiving a sort of massage and body pounding by the various operators, for which a fee of two dollars was collected. It was said that the "clinic" did a whale of a business, which statement is not doubted in the least, since our observation has been that a certain per cent of the public is gullible and that the more outlandish the claims made by these pretentious quacks and the more ridiculous the treatments used, the more successful they are financially.

The Bureau is by no means ready to call off its campaign against these enemies of our social order; further attacks are planned here and there over the state; and the more flagrant violators are to be brought to court. All this is very interesting to the medical profession, for by some inconceivable process the public has come to believe that the enforcement of the medical law is up to us! For a good many years we have tried to find some way in which we could bring this about, but never have succeeded. The Better Business Bureau points the way. These offenders *can* be prosecuted; most of them dislike publicity; they do not like to have their "come-on" methods aired. Probably many of these fakers even now are quaking in their boots. Certainly there are a few who have expressed a very wholesome interest in the outcome of some of these prosecutions.

The Bureau has made it clear that *It Can Be Done!* The only remaining problem is: how can this campaign be continued?

Editorial Notes

Again would we direct the attention of the profession to the indiscriminate sale and use of the barbiturates. It is hoped that the 1941 session of the Indiana legislature will do something with this problem. Almost daily we hear members of the laity mentioning that they have taken this or that form of the barbiturates, some of them stating that the use of the drug has become a common practice with them.

According to *The Journal of the American Medical Association* for October twelfth, more than 32.5 per cent of the applicants for enlistment in the regular Army in the Second Corps Area (New York City) were rejected for failure to meet the Army's physical requirements. These were from a group of 6,743 applicants. The major causes for these rejectments were teeth, eyes, height, feet, and ears. It is stressed that these young men were volunteers, which raises the question as to the probable state of health of our conscriptionists.

Well, in five more days it will be all over! The Presidential election, we mean! Never before in our memory—and we have been voting for candidates for this office since 1896—have we known of such a campaign. In fact, it has not been a campaign, as we used to know them. There have been no great parades and but few mass meetings at which the "issues of the day" were discussed. THE JOURNAL has consistently refrained from "taking sides," even though we have set opinions in the matter. May the best man win, and by "best man" we mean the man who is better fitted to preside over our destinies in these parlous times.

An editorial in *The Journal of the American Medical Association* for October twelfth very properly states that "mobilization offers occasion to aid study of epidemiology." The writer quotes the late Hans Zinsser who in 1917 pointed out that epidemics are almost inevitable when large numbers of men from all over the country are brought into training camps, there to engage in activities to which most of them are unaccustomed. With the modern concept of the subject and with complete laboratory facilities available, it is possible for intensive studies to be made along epidemiological lines.

"Dog days" are long past but we continue to bewail the lack of enforcement of a state law that provides a penalty of $25 for any dog owner who allows said dog to stray beyond the family premises. Somehow or other, most dog owners believe that once a tag is purchased their duty is ended, regardless of what their neighbors may think. We particularly have in mind one Chow (never did like Chows) which has a range of several blocks from his own domicile. However, we have succeeded in educating this particular pest to remain away from our personal real estate, but he does "tear up Jack" all about us.

A recent statement from the New York Crime Commission advises that every adult male in the United States pays an annual contribution of $55 as his pro rata assessment for commercial frauds of various sorts. In fact, as the Indianapolis Better Business Bureau points out, you pay this assessment twice: once in the direct loss and again in the loss of business resulting from the diversion of funds into uneconomic channels. Quite a bit of "tax" to pay, particularly when this money goes into the hands of the unscrupulous!

At long last the Federal Trade Commission is reaching into channels that directly concern the medical profession. Every little while we note that they have stopped some flagrant violator of the law. This time our attention is called to a "cease and

desist" order issued to Dr. W. B. Caldwell, Inc., makers and disseminators of the "celebrated Dr. Caldwell's Syrup of Pepsin," a nostrum long advertised as the *sine qua non*. The Commission asserted that pepsin has no therapeutic value as a laxative and that the presence of cascara sagrada and senna in the preparation was minimized. The company, on the other hand, declared among other things that the charges of the Commission were based on advertising that long since had been discontinued! Which brings to mind that the recent changes in our Food and Drug Act has brought many changes in the advertising copy of various nostrums.

The problem of what to do about dishonest medical testimony is not as acute as in former years, yet it continues to be bothersome. It seems that the Minnesota State Medical Association has for some time had under consideration various plans for the eradication of this undesirable condition. Now they submit a plan which, while it seems rather harsh, should be an effective control of this evil. It provides for the formation of a permanent Committee on Medical Testimony and it is proposed that the services of this committee will be available to any judge within the state, "should that judge have reason to believe that medical testimony in his court has deviated from the truth." The committee will study any such cases referred to it and their findings will be turned over to the State Board of Medical Examiners for disciplinary action. This means that offenders will be subject to censure or warning or to suspension or revocation of their license to practice medicine according to the judgment of the Board. It is said that the plan involves no change in the present medical laws of that state.

On October 1st, Local 802 of the American Federation of Musicians, one of the largest labor unions in the City of New York, put into effect its hospitalization and medical program for indigent members. Among the comments of the speakers at the ceremony, as reported in the New York *Times*, was one Woll, probably Matthew Woll, an official of the American Federation of Labor, who said, "The plan may be the beginning of a great national movement for medical security, not only for organized labor, but for all labor." The plan calls for "retained physicians," which means physicians hired by the month. This at once conflicts with the generally accepted idea in all group hospitalization and medical treatment plans, whereby the insured has the free choice of a physician. It means that these "retained" physicians will feel free to do as they please in the matter of rendering service. The plan will be watched with interest, not only by members of the medical profession but by other groups who have studied the possibilities of this idea, which is but a modification of the panel system in England of today.

While every state in the Union responded to the call for plans for conscription, residents of Indiana will be pleased to learn that the Hoosier state led all other states in getting ready for this nation-wide event. Some three months before the Burke-Wadsworth bill became a law, Indiana began preparations for this vast selective service program. President Roosevelt has commended Indiana, through Governor Townsend, for her prompt response. Not a small part of the credit is due the Indiana State Medical Association, because we "beat the gun" in having ready a complete list of medical men, already assigned to duties with the various boards. This was no small assignment, since there are 152 regular boards throughout the state and in addition the special Boards, all of which have medical representation thereon. It is but another instance of the cooperation the Indiana State Medical Association stands ready to deliver at short notice.

According to the *Journal of the American Medical Association*, for September 28th, "Plague must continue to rank high as a public health problem." It is stated that the first appearance of such scourge in this country was in San Francisco in 1900. In the following forty years there were 499 human cases reported, with 314 deaths. However, between 1934 and 1939 only fifteen cases with six deaths were reported. This disease usually is transmitted to man through various animals, chiefly those of the rodent family. Tularemia, now so commonly met in Indiana and other central states, is a disease of this type. And, speaking of tularemia, it should be borne in mind that too many Hoosier residents continue to scoff at such a thing as tularemia, commonly called "rabbit disease"; also, it is said that some of our physicians remain more than skeptical. The fact remains, however, that tularemia is on the increase and hunters who are wont to chase the elusive bunnies should be warned of the dangers that arise from handling these animals without due caution.

Quite some time ago we related that a salesman for stocks of more than questionable value confided to us that among all the people he called upon he found the medical profession the most gullible. Frequently some new scheme for mulcting members of our profession is aired but the one quoted below takes the palm for the present. This was reported in a recent issue of the *Bulletin of the Indianapolis Better Business Bureau*:

INGENIOUS TRICK TO SELL HOUSE NUMBERS

A local doctor has recently reported to us what appears to be an ingenious trick to sell lawn markers or house numbers. The doctor received a personally typed letter signed by "A Patient." The letter states that her small son Tommy had been taken suddenly ill one night when the lights were out for quite a length of time about 2:00 A. M. The husband attempted to drive to the doctor's

residence but couldn't find the residence because of inability to find his number. A copy of a circular which the "patient" claims to have found was sent to him with the suggestion that he should get one of these numbers, so that "next time we will have no trouble in locating you at night."

Unfortunately, this person claiming to be a patient misspelled the doctor's name, and the person addressed couldn't have been the family doctor because his specialty was pediatrics, and in addition this doctor had a reflecting sign in front of his home similar to the one advertised. It would appear, therefore, that the letter is but an ingenious (?) advertising trick.

The following item from the September nineteenth edition of the North Manchester *News-Journal* was sent to THE JOURNAL office by Dr. James Carter of Indianapolis who felt (and we agreed) that it merited editorial attention:

WHICH IS SAFER?

Is it safer to drink water from a well that has been tested for purity, or from one that has not been tested, even though the owner may say the water is "all right." Which is safer? To trade in a town like North Manchester where every effort and every precaution was taken to prevent spread of infantile paralysis, or in a town where there is as much or more paralysis, but which is wide open and bland assurance is being given that everything is "all right." Is it safer to trade in North Manchester where children have not been down town for several weeks, where public meetings have not been held, and where possible contact with the disease is at a minimum? Or to trade in some of the nearby towns and cities where fairs have been held, theatres, churches and other public meeting places are wide open, and where there has been only half hearted effort made to segregate children, even though school is not in session? Because the situation has been met squarely and efficiently in North Manchester, some people have the impression it is unsafe to come here to transact business. In fact North Manchester is probably the safest town to visit in the northern part of the state, because of the adequate measures taken by the health authorities. Barring further outbreak locally, restrictions will end Sunday morning, but business may be transacted safely Friday and Saturday.

In the October JOURNAL we published a letter from Mr. Wendell L. Willkie, Republican candidate for President, stating his views in regard to socialized medicine. A letter to President Roosevelt, in which was inclosed a copy of the Willkie statement, offered space in THE JOURNAL for a statement from President Roosevelt. The following letter was received in reply:

THE WHITE HOUSE
Washington

September 23, 1940

Dear Dr. Shanklin:

This acknowledges your letter of September eighteenth with enclosure. The President's views on the subject about which you inquire were expressed in a speech delivered at the Jersey City Medical Center, Jersey City, New Jersey on October 2, 1936 and, for your information, I have much pleasure in enclosing a copy of that speech. The views expressed by the President on that occasion have in no wise been changed or modified since the delivery of the speech in question and still constitute a complete statement of his principles.

Very sincerely yours,
(Signed) STEPHEN EARLY,
Secretary to the President.

This address of the President was delivered at the Jersey City Medical Center, Jersey City, N. J., Friday, October 2, 1936.

It is a privilege to take part in the dedication of this Medical Center—the third largest medical institutional group in the United States.

I am happy, too, that the Federal Government, through its Public Works expenditures, has been able to be of assistance to the municipal government of Jersey City and to Hudson County in making this Center possible. As a matter of fact, the expenditures through the Public Works Administration are increasing the capacity of American hospitals by nearly 50,000 beds. During the depression the difficulty of obtaining funds through municipal or private sources would have meant a serious shortage in caring for patients and in giving them adequate facilities had it not been for Federal assistance through loans and grants.

But there is another reason for increasing the bed capacity of the hospitals of the country. The Medical and Nursing professions are right in telling us that we must do more to help the small income families in times of sickness.

Let me with great sincerity give the praise which is due to the Doctors of the Nation for all that they have done during the depression, often at great sacrifice, in maintaining the standards of care for the sick and in devoting themselves without reservation to the high ideals of their profession.

The Medical profession can rest assured that the Federal Administration contemplates no action detrimental to their interests. The action taken in the field of health as shown by the provisions of the splendid Social Security Act recently enacted is clear.

There are four provisions in the Social Security Act which deal with health; and these provisions received the support of outstanding Doctors during the hearings before the Congress. The American Medical Association, the American Public Health Association and the State and Territorial Health Officers Conference came out in full support of the public health provisions. The American Child Health Association and the Child Welfare League endorsed the maternal and child health provisions.

This in itself assures that the health plans will be carried out in a manner compatible with our traditional social and political institutions. Let me make that point very clear. All States and Territories are now cooperating with the Public Health Service. All States except one are cooperating in maternal and child health service; all States but ten in service to crippled children and all States but nine in child welfare.

Public support is behind this program. But let me stress, in addition, that the Act contains every precaution for insuring the continued support and cooperation of the Medical profession.

In the actual administration of the Social Security Act we count on the cooperation in the future, as hitherto, of the whole of the Medical profession throughout the country. The overwhelming majority of the Doctors of the Nation want medicine kept out of politics. On occasions in the past attempts have been made to put medicine into politics. Such attempts have always failed and always will fail.

Government, State and National, will call upon the Doctors of the Nation for their advice in the days to come.

It is many long years ago that Mayor Hague and I discovered a common interest in the cause of the crippled child. This great Medical Center is, I know, close to his heart. I congratulate him on the fulfillment of a splendid dream. I congratulate Jersey City and Hudson County on modern facilities surpassed by no other community in America.

THE CANDIDATES FOR GOVERNOR DECLARE—

"My view on the question of socialized medicine may be stated briefly and definitely by saying I am opposed to it.

"The obligation of society to provide medical care for the unfortunate who cannot pay for professional services may be met without altering the system of private practice by which the doctors of Indiana have built a tradition of exceptional skill and service.

"As Chairman of the National Child Welfare Committee of the American Legion I assisted in working out in consultation with doctors what has been termed 'The Indiana Plan,' not advocated in every state, which is the medical association's response to socialized medicine.

"Doctors of professional standing should be consulted in all matters of legislation or public policy in which the medical profession is concerned.

"I am opposed to the control of any State medical services by groups or cliques."

—GLENN R. HILLIS,

Republican Candidate for Governor of Indiana.

From a speech delivered at Terre Haute, October 2, 1940.

"As lieutenant governor it has been my privilege to become intimately acquainted with the splendid public health program of the State of Indiana, since the activities of the State Board of Health come under the direct supervision of the lieutenant governor's office. In this respect I wish to compliment our public health officials and also express appreciation to the medical profession of Indiana for the wholehearted cooperation it has given those officials in meeting our health problems. It is unnecessary for me to point out that those who treat the sick each year give many thousands of dollars worth of service gratuitously and to express my fervent hope that the spectre of socialized medicine will never be allowed to black out the picture which is dear to every Hoosier of the patient in time of sickness and distress receiving aid from the physician of his own choice."

—LT.-GOV. HENRY SCHRICKER,

Democratic Candidate for Governor of Indiana.

From a speech delivered at Muncie, October 16, 1940.

UNDER THE CAPITOL DOME

DR. FERREE SUCCEEDS DR. HARVEY



Dr. Ferree

Dr. John W. Ferree became secretary of the Indiana State Board of Health last month, succeeding Dr. Verne K. Harvey. Appointment of Dr. Ferree was made by Governor M. Clifford Townsend.

Dr. Harvey resigned to accept a post as chief medical officer of the United States Civil Service Board of Commissioners at Washington.



Dr. Harvey

Dr. Ferree had been serving as director of the bureau of local health administration of the state health board, and his appointment as head of the board was recommended by Dr. Harvey and leaders of the Indiana State Medical Association. The appointment also was indorsed by Lieutenant Governor Henry F. Schricker, the Democratic candidate for Governor.

A native of Marion, Dr. Ferree is the son of John D. Ferree. He practiced medicine in Bluffton before he entered the state's service. He took his work for his master's degree in public health at Johns Hopkins University after he was graduated from the Indiana University school of medicine with a degree of doctor of medicine. After his graduation from the Marion High School he attended Wabash College one year and then entered the University of Pennsylvania where he was graduated with an A.B. degree in 1925. Leaving the University of Pennsylvania he obtained a position with the Chase National Bank in New York, but after a year he returned to Marion and operated a mattress factory until 1927 when he entered Indiana University as a pre-medic student. He was graduated from the school of medicine in 1932 and was intern for a year at Harper Hospital in Detroit, Michigan. He then served one year as resident physician at Passavant Hospital in Chicago and a year in a similar capacity in Evanston Hospital at Evanston, Illinois.

Dr. Ferree was appointed director of the bureau of local health administration in 1936 by former Governor Paul V. McNutt. In 1937 he took a leave of absence to attend Johns Hopkins to study for his master's degree.

The new health board secretary is 36 years old, is married and has two children. The family lives at 508 Berkley road, Indianapolis.

Dr. Harvey, who took over his new duties in Washington on October fourteenth, had been director of the state health division since 1933. He was first appointed by former Governor McNutt and was re-appointed by Governor Townsend in 1937.

The post which Dr. Harvey took over was newly created and was made necessary by increased civil service personnel in government departments in connection with the national defense program. He went to Washington last year to take examination for the position.

Dr. Harvey is a native of Indianapolis, born there November 6, 1898. He is the son of Mr. and Mrs. Clarence E. Harvey. The Harvey family moved to southern Hamilton county and he attended one of the early consolidated rural schools. He was graduated from the Carmel High School in 1917, and then entered Indiana University where he took his pre-medical work. During the World War he was a member of the United States naval reserves and was on duty at Bloomington. He was graduated from the university's school of medicine in 1929 and then served as an intern at the Indianapolis City Hospital. On July 1, 1930, Dr. Harvey became state epidemiologist with the state board of health and served until September 1, 1932, when he received a fellowship from the Rockefeller Foundation and studied at Johns Hopkins University. He began his service as secretary of the state board of health on July 1, 1933.

Dr. and Mrs. Harvey will make their home in Washington, D. C. Their son, Verne K. Harvey, Jr., is a pre-medic student at Indiana University.

PSYCHIATRISTS APPOINTED

Two psychiatrists have been assigned recently to state penal institutions, John H. Klinger, director of the Division of Corrections of the State Department of Public Welfare, has announced. Dr. Andrew B. Steele was placed in charge of psychiatric work at the state reformatory at Pendleton. This is a new post at that institution. Dr. Steele also will serve as prison surgeon. He was brought from the Eastern State Hospital at Hopkinsville, Kentucky, and formerly was psychiatrist at the United States Northeastern Penitentiary at Lewisburg, Pennsylvania. Dr. Palmer Gallup has been placed in charge of the Indiana Hospital for Insane Criminals at Michigan City. He was transferred from the Richmond State Hospital. Previously he had served at the Muscatatuck Colony.

VOCATIONAL TRAINING AT PENAL INSTITUTIONS

A program designed to give inmates of Indiana's penal institutions better vocational training during their periods of incarceration is being worked out by the State Department of Public Welfare.

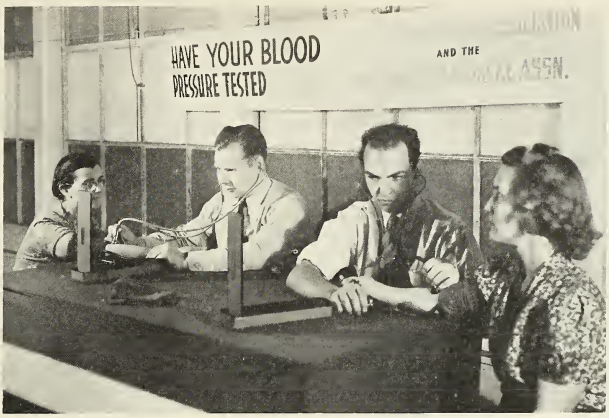
Under the present system, which will be replaced, prisoners are given training in specific and limited jobs, somewhat after the manner used in mass production industries, and no effort is made to give them any knowledge of allied work. For example, a prisoner now working in a prison shoe shop is not qualified to operate a shoe shop after he leaves the prison because he is taught only one operation. Under the proposed system he would leave the institution with a thorough knowledge of shoe work and would be able to run his own shop. The contemplated system would apply to all of the industries which are operated at the state's three penal institutions.

The first step, looking toward this new method of prisoner training, was taken when Dr. Edward C. Elliott, president of Purdue University, assigned Professor Russell J. Greenly and Professor M. G. Stigers of the University staff to make a survey of vocational training possibilities at the state prison at Michigan City, state reformatory at Pendleton, and state farm at Putnamville. This assignment was made at the suggestion of Thurman A. Gottschalk, director of the Department of Public Welfare. The two professors were to recommend methods for introducing a vocational training program in connection with the prison industries.

Although their report has not been submitted as yet to Mr. Gottschalk, it probably will recommend that the program should start with classes in foreman training. The classes will be for foremen of the various prison industries and the Purdue experts expect to find which of the foremen are capable of doing a teaching job. Men chosen for teachers will form classes among the prison inmates. The foremen are civilian employees of the institutions.

YOUR DECEMBER JOURNAL
WILL CONTAIN ALL REPORTS
AND NOTES FROM THE CONVENTION
AT FRENCH LICK. IN
ADDITION IT WILL CONTAIN
THE 1940 MEMBERSHIP ROSTER
AND THE YEAR'S INDEX.

STATE FAIR



Blood Pressures Taken, 3,309; Men, 1,296; Women, 2,013; Highest Pressure, 245.

Several features of interest were embodied in the 1940 State Fair exhibit of the Indiana State Medical Association and the American Medical Association.

This year 3,309 blood pressure recordings were made, and the totals average fairly well with those made during the previous three years of similar tests. A tabulated resumé of the findings is presented here.

Over 700 more blood pressures were taken this year than at any previous time, and only the physical limitations of the two medical students who took the readings prevented even a larger score.

The Board of Industrial aid to the blind, under the direction of Dr. Robert Masters, presented a most interesting and instructive demonstration of weaving and rug making by blind boys. Drawings of cross sections of the eye were shown, demonstrating vital areas which might be affected by disease or trauma.

The committee on the control of cancer showed a number of plaster models of different organs demonstrating various forms of the disease, in both early and late stages. Literature on the subject was distributed and the display attracted much interest.

We were fortunate in obtaining some models from The American Medical Association in Chicago which showed the bronchoscopic removal of a safety pin from the lung; the method of doing a nasopharyngeal examination, and a bell jar demonstration of lung action, using a rubber lung which inflated itself when a diaphragm covering the top of the bell jar was moved. A life size x-ray film of a female was shown. Several movable wooden models of various kinds of joints were also shown.

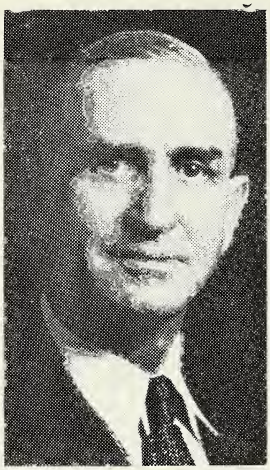
Exhibits were shown in the same building by the College of Pharmacy, the Tuberculosis Society, The Nurses Association, and the State Hospital Association.

Attendance of visitors was excellent, a constant stream of people being present. Frequently as many as twenty-five people were in line to have their blood pressures taken.

Six room coolers were kept filled with ice and running at all times near the exhibits.

Age Groups		5 - 10		11 - 20		21 - 30		31 - 40		41 - 50		51 - 60		61 - 70		71 - 80		Total
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Number		11	2	350	198	194	266	209	365	249	467	256	362	158	99	18	6	3,309
Diastolic Blood Pressure Over 100		0	0	0	3	2	2	1	26	15	34	15	24	10	26	2	0	190
Systolic Blood Pressure Over 150 with Diastolic less than 100		0	0	4	0	6	4	4	18	4	8	4	24	4	18	2	4	104
Systolic Blood Pressure		70		80	90	100	110	120	130	140	150	160	170	180	190	201		260
Number	Female	0		10	42	160	214	480	308	206	80	136	82	35	14			6
	Male	4		22	94	178	352	260	284	154	52	14	26	8	10			2
	Total	4		32	136	338	566	740	592	360	132	150	108	43	24			8

Deaths



Dr. McKain

Maurice Carlysle McKain, M.D., prominent surgeon of Columbus, was killed instantly in an automobile accident at East Columbus on September twenty-fifth when his automobile collided with a truck. Dr. McKain was forty-eight years of age. He took his pre-medical work at Moore's Hill College, and graduated from the Indiana University School of Medicine, Bloomington, in 1918. He specialized in surgery, and did extensive post-graduate work. He took two clinical courses abroad, in Vienna, in 1932.

Dr. McKain was in the Medical Reserve during the World War. He had served as district councilor for the Indiana State Medical Association for the last five years. He was a member of the Bartholomew County Medical Society, of the Indiana State Medical Association, and was a Fellow of the American Medical Association.

* * *

George Allen Whippy, M.D., of Goshen, died of a heart attack, in his office, on September twenty-third. He was seventy years of age. Dr. Whippy graduated from the Hahnemann Medical College and Hospital, Chicago, in 1891. He practiced at Middlebury and Ligonier, and located at Goshen in 1902, where he served as city health officer for many years. He was a former member of the Indiana State Medical Association.

* * *

Louis Woodruff Armstrong, M.D., of Danville, died suddenly at his home, September nineteenth, aged sixty-five years. Dr. Armstrong graduated from the University of Maryland School of Medicine and College of Physicians and Surgeons, Baltimore, Maryland, in 1900. He began his practice at Wahpeton, North Dakota, and located at Danville, Indiana, in 1912. Dr. Armstrong was a member of the Hendricks County Medical Society, of the Indiana State Medical Association, and was a Fellow of the American Medical Association.

* * *

George Washington Anglin, M.D., of Warsaw, drowned at the municipal bathing beach there, September fifteenth. He was sixty-five years old. Dr. Anglin was a graduate of Northwestern University Medical School, Chicago, in 1905, and was a member of the Kosciusko County Medical Society, the Indiana State Medical Association, and the American Medical Association.

* * *

Elisha Grove Anthony, M.D., died at his home in Indianapolis on September twenty-eighth, aged seventy-two years. Dr. Anthony specialized in ophthalmology and otolaryngology, and had practiced in Indianapolis for forty-three years. He graduated in 1889 from the Physio-Medical College of Indiana. He was a member of the Indianapolis Medical Society, of the Indiana State Medical Association, and was a Fellow of the American Medical Association.

* * *

George Temple Beckett, M.D., of Arlington, Indiana, died September twenty-eighth. Dr. Beckett was sixty-eight years of age. He graduated from the Medical College of Indiana, Indianapolis, in 1899.

* * *

Edwin B. Boots, M.D., of Terre Haute, was found dead in his office on October seventh. Dr. Boots was forty years of age. He graduated from the Indiana University School of Medicine, Bloomington, in 1930. He was a member of the Vigo County Medical Society, of the Indiana State Medical Association, and was a Fellow of the American Medical Association.

* * *

Leonard William Brown, M.D., of Indianapolis, died October fifth, after a long illness. He was sixty-four years of age. Dr. Brown had served as assistant medical examiner for the Pennsylvania Railroad Company at Cleveland, Ohio, Grand Rapids, Michigan, Fort Wayne and Indianapolis before retiring last May. He graduated from the Central College of Physicians and Surgeons at Indianapolis in 1903. He was a member of the Indianapolis Medical Society, of the Indiana State Medical Association, and was a Fellow of the American Medical Association.

Edward Clement Davidson, M.D., of Lafayette, died October seventh, aged seventy-three years. Dr. Davidson graduated from the Purdue University School of Pharmacy in 1889, and from the University of Michigan Medical School at Ann Arbor in 1891. He had practiced medicine in Lafayette since 1892, and during the nineties he served as coroner of Tippecanoe County for many years. Dr. Davidson specialized in surgery, and was one of the early members of the American College of Surgeons. He was a member emeritus of the staff of St. Elizabeth's Hospital at Lafayette, Indiana, and had served as chief of the surgery of that institution. During the World War he served as a member of the Volunteer Medical Service Corps of America. He was a member of the Tippecanoe County Medical Society, of the Indiana State Medical Association, and of the American Medical Association.

* * *

Samuel Sidney Foss, M.D., of Jeffersonville, died at his home in Valley Station, Kentucky, on October fifth. Dr. Foss graduated from the University of Louisville School of Medicine, Kentucky, in 1886. He had been a practicing physician for fifty-four years, and had practiced at Sellersburg, Indiana, sixteen years. Dr. Foss was a captain in the Medical Corps during the World War. He was a member of the Clark County Medical Society, the Indiana State Medical Association, and the American Medical Association.

* * *

Guy Fulton Hobbs, M.D., died at his home in Indianapolis on September twenty-first. He was fifty-five years of age. Dr. Hobbs graduated from the Indiana University School of Medicine in 1911.

* * *

Lorin W. Smith, M.D., former resident of Wabash, Indiana, died at his home at Hastings, Minnesota, on October ninth following an extended illness. He was seventy-five years of age. Dr. Smith at one time served as mayor of Wabash. He graduated from the University of Pennsylvania School of Medicine, Philadelphia, in 1893. He was a member of the Wabash County Medical Society, the Indiana State Medical Association, and the American Medical Association.

* * *

Cassius H. Fullinwider, M.D., of Mount Vernon, Indiana, died at his home on October twelfth, aged eighty-six years. Dr. Fullinwider practiced at Petersburg from 1884 to 1892 and in Mount Vernon from 1892 to 1934 when he retired. He graduated from the Medical College of Ohio, Cincinnati, in 1883, and took post-graduate work in Philadelphia and New York. Dr. Fullinwider was a past president and honorary member of the Posey County Medical Society, was a member of the Indiana State Medical Association, and was for forty years a member of the American Medical Association.

News Notes

Dr. Lyman H. Ellis has opened an office for medical practice at Lizton.

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Dr. Robert T. Hazinski has moved from South Bend to Griffith where he will conduct a general practice.

* * *

Dr. Russell S. Henry, of Indianapolis, has been made president of the Indianapolis Rotary Club.

* * *

Dr. and Mrs. Herbert T. Wagner have gone to Richmond, Virginia, where they will reside and where Dr. Wagner will be director to the Stuart Circle Hospital.

* * *

Dr. William S. Workman, retired physician of Orleans, Indiana, observed his eighty-third birthday at his home in Mitchell, October fourth.

* * *

Dr. H. C. Wadsworth, of Washington, has been given a twenty-year-attendance-record pin by the local Rotary club.

* * *

Members of the Alumni Association of the Central College of Physicians and Surgeons heard Dr. John F. Barnhill at their annual reunion in the Columbia Club, Indianapolis, September twenty-fifth. The meeting was presided over by Dr. Arthur E. Stinson, of Rochester; Dr. Lillian Crockett Lowder is secretary for the group.

* * *

Through the generosity of the Greencastle Elks Club, maternity kits are now available to the physicians of the community for home deliveries.

* * *

Hendricks County commissioners have appointed Dr. M. E. Frantz, of Danville, to succeed the late Dr. L. W. Armstrong as county physician. Dr. Frantz is also county coroner.

* * *

Dr. Russell K. Horsman, of Kokomo, and Miss Lotte Nevella Benedick were married at the home of the bride's parents in Manhattan, Kansas, September, twenty-eighth.

* * *

Dr. Fay F. Boys, of East Chicago, and Miss Jean Sopko, of East Chicago, were married September twenty-eighth.

* * *

Dr. Charles Burdsall, retired Jefferson County physician, celebrated his ninetieth birthday September twenty-ninth, when his friends and neighbors arranged a picnic in his honor at Clifty Falls State Park. Dr. Burdsall resides in Hanover.

* * *

Dr. Willard A. Price, of Nappanee, and Nellie R. Coppes, of Denver, Colorado, were married at Crete, Nebraska, in September.

Dr. R. M. Hansell has opened an office at 5723 West Morris Street in Indianapolis where he will conduct a general practice.

* * *

Dr. N. C. Folkening, of Acton, Indiana, has gone to Detroit where he has accepted a fellowship in Medicine at Henry Ford Hospital.

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Mrs. J. Cooper Props of Muncie and Dr. Charles Bruce Kern of Lafayette were married at Harrodsburg, Kentucky, October fourth.

* * *

Miss Clementine Foster of Fort Wayne and Dr. Clarence C. Bosselmann of Fort Wayne were married October fifth.

* * *

Dr. Jesse Briggs, practicing physician at Churubusco for the past thirty-seven years, celebrated his sixtieth birthday, October fourth, with a turkey dinner at which fifty guests were present.

* * *

Dr. Ivan Carlyle of Sedalia and Mrs. May Kingery of Middlefork were married October ninth.

* * *

Miss Alberta Marie Speicher and Dr. Lyman D. Eaton, both of Indianapolis, were married October twelfth.

* * *

Miss Mildred Harting of North Manchester and Dr. Lawson J. Clark of Indianapolis were married in Indianapolis October eleventh.

* * *

Dr. Kenneth Kraning, of Kewanna, is building an office building for his own use. It will be a one-story building with fourteen rooms. It is expected that the structure will be ready for occupancy about the first of the year.

Dr. J. R. Fouts has announced the opening of his office for the practice of medicine at English, Indiana.

* * *

Dr. C. O. McCormick addressed the American Association of Obstetricians, Gynecologists and Abdominal Surgeons at its convention held September 26 to 28 at Excelsior Springs, Missouri. Dr. McCormick's topic was "The Effect of Obstetric Analgesia Among the New Born."

* * *

At the meeting of the Central Association of Obstetricians and Gynecologists held in Indianapolis in October, Dr. John D. Moore of Fargo, North Dakota, was made president-elect; Dr. Thomas B. Sellars of New Orleans assumed the presidency; Dr. Minnie Maffett of Dallas, Texas, was made vice-president; Dr. William Mengert of Iowa City, Iowa, was elected secretary-treasurer; and Dr. Carl P. Huber of Indianapolis was re-elected assistant secretary.

* * *

The March 1941 issue of the *Mississippi Valley Medical Journal* will be that publication's fourteenth annual "radium number." It will follow the same general plan as in previous years. Short papers on any phase of radium therapy of practical interest to the general practitioner or general surgeon are solicited. They must reach the editor, Dr. Harold Swanberg, 209 W.C.U. Building, Quincy, Illinois, not later than February 20, 1941.

* * *

The 1940 award of the Central Association of Obstetricians and Gynecologists for the outstanding paper of the year was made to Dr. Carl P. Huber, associate professor of obstetrics at I.U. medical school, during the convention of the Association in Indianapolis the week of October seventh. Dr. Jack



The above photograph was submitted by Dr. L. M. Knepple of Kokomo (extreme right in the picture) with the comment that he was present at the birth of the mother and was with her at the birth of each of her twelve children, all of whom are living. The oldest child was born in November 1919, the youngest (in the mother's arms) was born in February 1939.

S. Shrader, intern at Indianapolis City Hospital, assisted in preparation of the paper. The award consists of a certificate and a $100 cash prize.

* * *

The American Conference on Industrial Health will be held Thursday, November fourteenth, at the Towers Club in Chicago. The conference will be sponsored by the American Association of Industrial Physicians and Surgeons.

* * *

Dr. C. Basil Fausett has returned to Indianapolis after spending three and one-half years in postgraduate study at the New York Hospital and Cornell University Medical Center in New York City. Dr. Fausset has relocated his office at 408 Hume Mansur Building where he will limit his practice to surgery with special attention to neurological and thoracic surgery.

* * *

"Doctors At Work" is the title of the sixth annual series of dramatized radio programs to be presented by the American Medical Association and the National Broadcasting Company. The series will open Wednesday, November 13, 1940, and will run for thirty consecutive weeks, closing with a broadcast from the A.M.A. meeting at Cleveland on June 3, 1941. The program is scheduled for 10:30 p. m. Eastern Standard Time (9:30 Central; 8:30 Mountain; 7:30 Pacific time) over the Blue network, other NBC stations and Canadian stations. The programs will dramatize what modern medicine offers the individual in the way of opportunities for better health and the more successful treatment of disease. Incidental to this main theme, the programs will explain the characteristics of the different fields of modern medicine and its specialties.

* * *

Abbott Hall, the new twenty-story dormitory at Northwestern University, is named for Wallace C. Abbott, founder of Abbott Laboratories, and his wife, Clara Abbott, from whose estate Northwestern University received a gift of $1,500,000 for use in medical, chemical, and surgical research. Medical school students will occupy four floors of the hall. This is the eighth structure on Northwestern Chicago campus. Now being completed is the twenty-story Wesley Memorial Hospital Building, which will cost $3,000,000. It is the second hospital on the campus and will supplement Passavant Memorial Hospital as a teaching center for the university's medical students. It is the first unit of the proposed George Herbert Jones Hospital center which is to include an amphitheater, chapel, nurses' dormitory, and diagnostic clinic. A third hospital on the campus will be started soon, and is made possible by a gift in excess of two million dollars from the estate of Mrs. Margaret Gray Morton.

REFRESHER PROGRAM IN PEDIATRICS SPONSORED BY PARKE-VERMILLION COUNTY MEDICAL SOCIETY

A regional program in pediatrics has been arranged for the dates indicated, through the cooperation of the Parke-Vermillion County Medical Society and the Bureau of Maternal and Child-Health of the Indiana State Board of Health. This program has been designed to give a comprehensive review of some important pediatric subjects. All meetings will be held at the Vermillion County Hospital at Clinton, Indiana. Dinner meeting to start at 6:00 P. M. Scientific programs start at 7:00 P. M.

October 16, 1940

"Infant Feeding"—J. C. Carter, M.D., Chief of Pediatric Section of Indianapolis City Hospital

November 20, 1940

"Prevention, Diagnosis, and Treatment of Contagious Diseases in Children"—Francis C. Smith, M.D., Consultant to Contagious Department of the Indianapolis City Hospital

December 18, 1940

Symposium on, "The Care of the Premature and Newborn Infant"

1. Medical and Public Health Aspects—Howard B. Mettel, M.D., Chief of Bureau of Maternal and Child-Health of State Board of Health; and, Associate Professor of Pediatrics of Indiana University School of Medicine
2. Nursing Care—Mary Ellen Warstler, R.N., Consultant in Pediatrics of Bureau
3. Motion Picture entitled, "Care of the Premature Baby." (2 Reels)

POSTGRADUATE COURSE IN OBSTETRICS SPONSORED BY THE TIPPECANOE COUNTY MEDICAL SOCIETY

A postgraduate course in obstetrics, sponsored by the Tippecanoe County Medical Society in cooperation with the Bureau of Maternal and Child Health of the Indiana State Board of Health will be held at the Home Hospital, Lafayette, Indiana. The afternoon sessions will start at 4:00 P. M., followed by dinner at 6:00 P. M. The evening meetings will be held from 7:00 to 9:00 P. M.

First Meeting—Thursday, November 7, 1940

4:00	1.	Antenatal Care
6:00 P.M.	2.	The Mechanism of Delivery (With motion pictures)
7:00	1.	The Management of Labor
9:00 P.M.	2.	Episiotomy and Repair (With motion pictures)

Second Meeting—Thursday, November 14, 1940

4:00	1.	Abortion and Ectopic Pregnancy
6:00 P.M.	2.	Postpartum Hemorrhage (With motion pictures)
7:00	1.	Placenta Previa and Abruptio Placenta
9:00 P.M.	2.	Medical Complications of Pregnancy

Third Meeting—Thursday, November 28, 1940

4:00	1.	Posterior Positions
6:00 P.M.	2.	Breech Delivery (With motion pictures)
7:00	1.	Indications for the Use of Forceps
9:00 P.M.	2.	Forceps (With motion pictures)

Fourth Meeting—Thursday, December 5, 1940

4:00	1.	Puerperal Infection
6:00 P.M.	2.	Cesarean Section (With motion pictures)
7:00	1.	The Toxemias of Pregnancy
9:00 P.M.	2.	Eclampsia (With motion pictures)

CONVENTION NOTES AND REPORTS
WILL BE PUBLISHED
IN THE DECEMBER ISSUE
OF THE JOURNAL

STATE CONFERENCE ON SOCIAL WORK

A symposium on the social implications of health problems will be included in an institute for social workers and all Hoosiers interested in social welfare during the first two days of the annual meeting of the Indiana State Conference on Social Work in Indianapolis, November 6 to 9. The symposium is being arranged by the Indiana State Medical Association and will feature discussants and speakers selected by the medical association and the Indiana University Training Course for Social Work.

On Friday, November 8, members of the Health Division of the Conference will gather for their annual business meeting and discussion of current health problems in Indiana. George M. Brother, M.D., medical director of district health department No. 4, Rising Sun, is chairman of the Health Division; Thomas A. Hendricks, executive secretary of the Indiana State Medical Association, is vice-chairman, and Mrs. Helen Marshall, executive secretary of the Vanderburgh County Tuberculosis Association, Evansville, is secretary. Murray A. Auerbach, executive secretary of the Indiana Tuberculosis Association, is president of the Conference.

Samuel W. Hartwell, M.D., professor of psychiatry, University of Buffalo Medical School, will lead a two-day course on child welfare. Topic of the discussion will be "Our Present Culture and the Problems It Creates for the Adolescent."

Herman M. Baker, M.D., of Evansville, past president of the Indiana State Medical Association and a vice-president of the State Conference on Social Work, will preside at a joint meeting of all divisions of the Conference on Saturday, November 9, when Arthur Dunham, professor of community organization, Institute of Public and Social Administration, University of Michigan, Detroit, will lecture on "The Dynamics of Community Organization."

Immediately following Mr. Dunham's address, John W. Ferree, M.D., director of the Indiana State Board of Health, Indianapolis, is to lead a round-table discussion on community organization as it pertains to public health activities.

Program for the Health Section of the Study Course for the Indiana State Conference on Social Work

All meetings on Health Section of the State Conference on Social Work will be held in the Florentine Room, Mezzanine Floor, Claypool Hotel, Indianapolis.

November 6, 1940

9:30

11:30 A.M. Presiding: Howard B. Mettel, M.D.
Chief of Maternal and Child-Health Bureau, Indiana State Board of Health.

Topic: Discussion of the Final Report of the White House Conference on Children in a Democracy-Health Section.

Leader: Roscoe L. Sensenich, M.D., South Bend, Past President of the Indiana State Medical Association, and member of the Board of Trustees of the American Medical Association.

Health Education—Thurman B. Rice, M.D., Indianapolis, Indiana.

Communicable Disease Control—Gerald F. Kempf, M.D., Indianapolis, Indiana.

Mental Health—C. H. Cronich, M.D., Indianapolis, Indiana.

Hospitalization—R. L. Sensenich, M.D., South Bend, Indiana.

Nutrition and Periodic Health Examination—L. Segar, M.D., Indianapolis, Indiana.

2:00

3:00 P.M. Indiana's Program for the Care of the Premature and Newborn Infant—Howard B. Mettel, M.D.

3:00

4:00 P.M. Discussion of New Indiana Laws Affecting Health—

Premarital Law, Prenatal Law.

Thurman B. Rice, M.D., Chief of the Bureau of Physical Health Education, Indiana State Board of Health.

November 7, 1940

9:30

11:30 A.M. **Symposium on Health Problems of the Aged**

Introduction by John Cunningham, M.D., Indianapolis.

Heart Diseases—C. J. Clark, M.D., Indianapolis.

Nutritional Problems—J. O. Ritchey, M.D., Indianapolis.

Special Dietary Problems—Diabetes and Stomach Ulcer—John H. Warvel, M.D., Indianapolis.

Mental and Emotional Problems—David A. Boyd, M.D., Chief of Staff of Mental and Nervous Diseases of Indiana University School of Medicine.

2:00

4:00 P.M. Panel Discussion.

Theme—**"The Role of a Social Worker in a Medical Care Program"**

Chairman—W. D. Gatch, M.D., Dean of Indiana University School of Medicine.

Medical Discussants—

Herman M. Baker, M.D., Chairman of Liaison Committee of Indiana State Medical Association to the State Department of Public Welfare.

David A. Boyd, M.D., Chief of Staff of Mental and Nervous Diseases of Indiana University School of Medicine.

John D. Van Nuys, M.D., Director of Admissions, Indiana University School of Medicine Hospitals.

Welfare Discussants—

Miss Mildred Arnold, Director of Children's Division of State Department of Public Welfare.

Louis E. Evans—Associate Professor of Sociology at Indiana University Training Course for Social Work.

Miss Helen Sanders—Instructor, Indiana University Training Course for Social Work.

VITAMIN-FREE FOODS FOR RESEARCH

A recent announcement by the Research Laboratories of the S.M.A. Corporation reveals that they are now in a position to provide vitamin-free casein and other vitamin-free foods for experimental purposes to researchers who have previously been obliged to manufacture these items for private use. For many years the S.M.A. Corporation has been producing these foods exclusively for use in their laboratories. Now, with the expansion of their own facilities and the realization of the convenience to others engaged in laboratory work this offer is made to provide vitamin-free diets at an exceptionally reasonable cost. Quantities of one, five, ten or 100 pounds or more may be ordered directly from the Research Laboratories, S.M.A. Corporation, Chagrin Falls, Ohio.

INDIANA UNIVERSITY NEWS

Dr. Carl P. Huber, full-time associate professor of obstetrics at the Indiana University School of Medicine, has received the 1940 award of the Central Association of Obtetricians and Gynecologists for the outstanding paper of the year.

Dr. Huber's paper, prepared with the assistance of Dr. Jack S. Shrader, 1940 graduate of the medical school and now an intern in the Indianapolis City Hospital, discusses the use of Vitamin E in building up prothrombin in the blood of infants. Prothrombin is a substance that brings about normal congealing of the blood to offset hemorrhage.

The association, composed of more than 300 obstetricians and gynecologists in the north and south central states, made the presentation of a certificate of award and a $100 cash prize at its convention in Indianapolis the latter part of October.

Dr. W. D. Gatch, dean of the Indiana University Medical School, said the award "is a decided honor to the Indiana University Medical School and Medical Center as well as to Dr. Huber and Dr. Shrader. The paper, based on studies at William H. Coleman Hospital, brings recognition from outstanding professional men in more than a third of the states of the nation."

A total of 182 infants was studied, with Dr. Shrader conducting the technical phases of Dr. Huber's research. Prothrombin in infants drops in content during the first few days of life. Hemorrhage is an important factor in the infant's chances for survival. It is estimated that one out of 100 infants are subject to hemorrhage and that one-fourth of all infants who die have suffered hemorrhage of the brain resulting from injuries at birth.

Dr. Huber is a graduate of the University of Michigan, receiving his degree in 1928. He was in the department of obstetrics and gynecology at the University of Michigan medical school until 1936. He spent the following two years in the Chicago Lying-In Hospital and became full-time professor of obstetrics at the Indiana University medical school in 1938. He is director of postgraduate education in obstetrics for the Indiana State Board of Health. He is a native of Ann Arbor, Michigan.

Dr. Shrader is a native of Indianapolis. He received the Ravdin gold medal, awarded to the student ranking highest scholastically in his class, at commencement last June.

Four appointments to the faculty and administrative staff of the Indiana University School of Medicine at Indianapolis have been announced by Dean W. D. Gatch of the I.U. School of Medicine.

Major I. S. Peak, U.S.A. Retired, former clinical director of Pinebluff Sanitarium, Pinebluff, N. C., Dean Gatch announced, has been appointed assistant professor of military science and tactics in charge of the R.O.T.C. medical unit on the Indianapolis campus. He succeeds Lieut. Col. Wilson C. von Kessler, recently transferred to command of the medical regiment of the Seventh Division, Camp Ord, Calif.

Other appointments include:

Dr. Alex T. Ross, former research neurologist of the Michigan Farm Colony for Epileptics and graduate of the University of Oregon Medical School, as assistant professor of neurology;

Dr. Joseph Tether, graduate of Lehigh University and Johns Hopkins University School of Medicine, as assistant to Dr. John D. Van Nuys, medical director and director of admissions of the University hospitals;

William Douglas, of Lafayette, sophomore in the School of Medicine, to be assistant registrar succeeding Grace Blankenship, who recently was named registrar.

Dr. David A. Boyd, head of the department of neurology and psychiatry, announced that a fellowship in child study and guidance provided by the William C. Huesmann Fund had been awarded to Dr. G. Herbert Cronick, who until recently was a fellow in psychiatry at the Institute of the Pennsylvania Hospital for Mental Diseases, Philadelphia.

"There is no mental state which man tolerates as badly as uncertainty but we seem doomed to uncertainty at least for some time," Dean W. D. Gatch told incoming students of the Indiana University School of Medicine.

"In the presence of this fact, our only wise course is to hope for the best but to be ready for the worst. The medical student best can serve his country by learning every lesson, by conducting himself in a proper manner and in brief, by doing all he can to make himself a competent physician capable of serving his country in any emergency."

Dean Gatch reviewed the year's activity of the medical school and pointed out that the most noteworthy progress in education during the past year was the thorough use of comprehensive oral examinations.

EXAMINATIONS OF AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY

The written examination and review of case histories (Part I) for Group B candidates will be held in the various cities of the United States and Canada on Saturday, January 4, 1941, at 2:00 p. m.

Information and application blanks may be obtained from the secretary, Dr. Paul Titus, 1015 Highland Building, Pittsburgh (6), Pennsylvania.

BOOKS

Books Received

PRACTICE OF MEDICINE. By Jonathan Campbell Meakins, M.D., LL.D., professor of medicine and director of the Department of Medicine, McGill University; formerly professor of Therapeutics and Clinical Medicine, University of Edinburgh. Third edition, 1430 pages with 562 illustrations including 48 in color. Cloth. Price $10.00. C. V. Mosby Company, St. Louis, 1940.

* * *

METHODS FOR DIAGNOSTIC BACTERIOLOGY. A Complete Guide for the Isolation and Identification of Pathogenic Bacteria for Medical Bacteriology Laboratories. By Isabelle G. Schaub, A.B., assistant in Bacteriology, Department of Pathology and Bacteriology, The Johns Hopkins University School of Medicine, and M. Kathleen Foley, A.B., Bacteriologist in charge of the Diagnostic Bacteriological Laboratory of the Medical Clinic, The Johns Hopkins Hospital, Baltimore. 313 pages. Cloth. Price $3.00. C. V. Mosby Company, St. Louis, 1940.

* * *

VITAMIN THERAPY IN GENERAL PRACTICE. By Edgar S. Gordon, M.D., M.A., associate in medicine and instructor in physiological chemistry, University of Wisconsin; and Elmer L. Sevringhaus, M.D., F.A.C.P., professor of medicine, University of Wisconsin. 258 pages. Cloth. Price $2.75. The Year Book Publishers, Inc., Chicago, Ill., 1940.

* * *

OBSTETRICS IN GENERAL PRACTICE. By J. P. Greenhill, B.S., M.D., F.A.C.S., professor of obstetrics and gynecology, Loyola University Medical School, Chicago. 448 pages. Cloth. Price $3.50. The Year Book Publishers, Inc., Chicago, 1940.

* * *

1940 YEAR BOOK OF PUBLIC HEALTH. Edited by J. C. Geiger, M.D., Dr.P.H., Director of Public Health, City and County of San Francisco; clinical professor of epidemiology, University of California. 560 pages. Cloth. Price $3.00. The Year Book Publishers, Inc., Chicago, 1940.

* * *

A TREATISE ON MEDICOLEGAL OPHTHALMOLOGY. By Albert C. Snell, M.D., lecturer in ophthalmology, School of Medicine and Dentistry, University of Rochester. 312 pages, illustrated. Cloth. Price $6.00. The C. V. Mosby Company, St. Louis, 1940.

* * *

SYNOPSIS OF MATERIA MEDICA, TOXICOLOGY, AND PHARMACOLOGY. For Students and Practitioners of Medicine. By Forrest Ramon Davison, B.A., M.Sc., Ph.D., M.B., Assistant Professor of Pharmacology in the School of Medicine, University of Arkansas, Little Rock. 633 pages with 45 illustrations, 4 in color. Fabricoid binding. Price $5.00. The C. V. Mosby Company, St. Louis, 1940.

* * *

BACILLARY AND RICKETTSIAL INFECTIONS. By William H. Holmes, M.D., Professor of Medicine, Northwestern University Medical School, Chicago; and chairman of the Department of Medicine, Passavant Memorial Hospital, Chicago. 676 pages. Cloth. Price $6.00. The MacMillan Company, New York, 1940.

SOCIETIES AND INSTITUTIONS

INDIANA STATE MEDICAL ASSOCIATION
THE EXECUTIVE COMMITTEE

September 8, 1940

Roll call showed the following present: C. A. Nafe, M.D., chairman; C. H. McCaskey, M.D.; K. R. Ruddell, M.D.; A. M. Mitchell, M.D.; M. A. Austin, M.D.; E. M. VanBuskirk, M.D.; A. F. Weyerbacher, M.D.; Albert Stump, attorney, and T. A. Hendricks, executive secretary.

Membership Report:

Number of members Sept. 7, 1940.....3,143 (90 hon. mems.)
Number of members Sept. 7, 1939.....3,095
Gain over last year..... 48
Number of members Dec. 31, 1939.....3,145

The statements of Receipts and Expenditures for July and August for the association committees and for THE JOURNAL were approved.

Treasurer's Office

The treasurer presented a report upon the Rokeby Liquidation Trust. The state association has $1,000 of these bonds which at one time were written off the books as a total loss. However, within the last few years these bonds have shown a gain in value.

1940 Annual Session at French Lick, Tuesday, Wednesday and Thursday, October 29, 30 and 31, 1940.

Health Officers' meeting. Dr. Harvey states that the annual health officers meeting is to be held Monday, October 28, the day preceding the state meeting at French Lick.

Chemico Laboratories. The Executive Committee approved accepting the Chemico Laboratories' reservation for exhibit space.

Scientific program. All places are filled on the program.

Speakers for veterans' luncheon. The committee approved talks at the veterans' luncheon by Dr. Fred W. Rankin, medical director of the Fifth Corps Area, Lieutenant-Colonel Robinson Hitchcock, executive officer, Adjutant General's office of the State of Indiana, and Dr. Carl M. Peterson, secretary of the Council on Industrial Health of the American Medical Association. Dr. Peterson is to talk on "Preparedness on the Industrial Front."

Badges. The committee approved a ribbon badge to be supplied by the Benham-Pray Company.

The committee instructed the secretary to see that the identification cards are typed in capital letters.

Annual report of Executive Committee. The committee approved the annual report as written after making several corrections.

Amendments to Constitution to be considered at French Lick.

a. Resolution introduced by Dr. Ira Perry which would do away with the stipulation in the present Constitution that no delegate shall be eligible to any office.

b. Resolution in regard to lowering the limitation on an automatic honorary membership from 75

to 65 years of age. The committee pointed out that if this resolution is passed, some 602 physicians will be eligible to honorary membership who are not eligible under the present 75-year limitation. If this broadening of honorary membership qualifications is passed and if all members who are 65 years of age are eligible to honorary membership, the annual income of the association would be reduced by $6,000.

c. Change in Constitution which would eliminate the words, "to guard and foster the material interests of its members," discussed by the committee.

Change in By-Laws. Suggested change in By-Laws introduced last year that component societies which are made up of physicians of more than one county be entitled to at least one delegate for each county, to be selected by the physicians residing in such county, to be brought before the House of Delegates at the coming session.

Organization Matters

Word received of the discontinuance of the full-time executive secretary's office in St. Joseph county.

Medical Economics

Letter received from Dr. A. J. Sparks in regard to the possible opening for a physician at Orland, Indiana.

Medical Relief

Monthly report upon WPA cases for July and August brought to the attention of the committee. The committee suggested that these reports be sent to Dr. J. S. Leffel, chairman of the Medical Relief Committee.

Military Preparedness

750 questionnaires returned to the headquarters office.

The committee highly approved the September issue of THE JOURNAL which was devoted to military medicine. Numerous compliments have been received from throughout the country in regard to this issue.

48 county M-day committees have been appointed.

Report made that suggestions regarding physicians to serve as examiners and alternates on the local selective service boards and the Congressional District Medical Advisory Boards are being received at the headquarters office.

Letters from Dr. H. C. Wadsworth of Washington, Dr. John Conley of Fort Wayne, and Dr. Parvin Davis of New Albany, brought to the attention of the committee.

Committee informed that the selective service bill probably will not provide for pay for physicians who serve on selective service boards or who act as examiners on such boards. All civilian board members are to serve without receiving compensation.

Forty-five percent of the Indiana physicians have

(Continued on page xxiv)

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(Continued from page xxiii)

answered the A.M.A. questionnaire which places Indiana twenty-fourth on the list. (Since the publication of the military medicine issue of THE JOURNAL, Indiana has jumped to 68% and now rates ninth on the state list.)

The committee instructed that vigorous attempts be made to have all physicians answer the A.M.A. questionnaire as soon as possible.

Farm Security Administration

Word received from the Montgomery County Medical Society that Farm Security Administration examinations were made in that county with the approval of the society.

The Journal

Cards of deceased physicians. The following action was taken by the Council at the midwinter meeting held January 7, 1940, in regard to carrying cards of deceased physicians:

> The Council went on record approving the motion that "the card of a deceased physician shall be dropped from THE JOURNAL as soon as his death is known and that his family shall be refunded any money that has been paid in advance on a pro-rata basis the month following his death."

Delinquent professional card accounts. The Executive Committee adopted the rule that professional cards should be removed from THE JOURNAL after the accounts are six months delinquent.

INDIANA STATE BOARD OF HEALTH

BUREAU OF COMMUNICABLE DISEASES

Monthly Report, August, 1940

Diseases	*Aug. 1940*	*July 1940*	*June 1940*	*Aug. 1939*	*Aug. 1938*
Tuberculosis	225	147	172	193	174
Chickenpox	19	26	208	11	9
Measles	22	29	77	14	23
Scarlet Fever	73	61	198	91	74
Smallpox	1	4	16	3	14
Typhoid Fever	19	14	19	33	62
Whooping Cough	74	75	137	234	40
Diphtheria	22	19	13	23	26
Influenza	9	8	25	8	14
Pneumonia	30	29	55	25	23
Mumps	24	33	205	24	8
Poliomyelitis	261	19	2	4	1
Meningitis	2	4	7	0	3
Trachoma	1	0	2	6	0
Tularemia	1	1	2	0	0
Malaria	15	0	0	9	1
Undulant Fever	4	7	13	10	0
Encephalitis	1	2	0	0	0
Septic Sore Throat	1	0	0	0	0
Rocky Mountain Spotted Fever	2	3	2	6	3
Dysentery	2	1	0	0	0
Tetanus	1	1	2	0	0

LOCAL SOCIETY REPORTS

Carroll County Medical Society members were entertained at the home of Dr. and Mrs. Elias H. Brubaker, at Flora, on September twelfth. Dr. Jacob K. Berman, of Indianapolis, gave the principal address, "Diverticulitis and Diverticulosis." Eleven members were in attendance.

* * *

Cass County Medical Society and the Cass County Public Health and Tuberculosis Association held a joint dinner meeting at Logansport, October first. Dr. Bruce Douglas, of Detroit, Michigan, spoke on "Winning the Fight Against Tuberculosis." Members of the county council and Cass county commissioners were guests at the meeting.

* * *

Delaware-Blackford County Medical Society and the Muncie Academy of Medicine opened their fall and winter program with a joint meeting held at Hotel Roberts, Muncie, September seventeenth. Dr. Kemper N. Venis, of Muncie, presented a paper on "Treatment of Neurosyphilis," and a discussion on the topic was conducted by Dr. Theodore R. Hayes, of Muncie. Thirty-five members and guests were present.

* * *

Dearborn-Ohio County Medical Society members held a dinner meeting at Lawrenceburg, September twenty-sixth. The after-dinner speaker was Dr. George F. Smith, of Lawrenceburg, his subject being "Anterio-poliomyelitis." Eleven members attended the meeting.

* * *

Dubois County Medical Society held a meeting at the Huntingburg Memorial Library, Huntingburg, on September twenty-sixth. Fourteen members were present. Dr. Oliver W. Greer, of the Crippled Children's Division of the State Department of Public Welfare, spoke on "Infantile Paralysis."

* * *

Fort Wayne (Allen County) Medical Society members met at the Allen County Infirmary, Fort Wayne, for a dinner meeting on September third. Dr. Everett A. King, physician to the Allen County Infirmary, was host to the society. After dinner, clinical cases from the Infirmary Hospital were presented. Attendance numbered forty-nine.

On September seventeenth, the Fort Wayne Medical Society held a meeting at the Chamber of Commerce Building, Fort Wayne. The guest speaker was Dr. Milton Rose of the University of Pennsylvania. Dr. Rose talked on "Poliomyelitis." One hundred forty-eight physicians attended the meeting.

At the September twenty-fourth meeting of the Fort Wayne Medical Society thirty-seven members were in attendance. Following the regular monthly

(Continued on page xxvi)

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(Continued from page xxiv)

business meeting, Dr. Marshal B. Catlett, of Fort Wayne, spoke on "Surgical Lesions of the Stomach."

On September twenty-fifth, the Fort Wayne Medical Society met in the Chamber of Commerce Building, Fort Wayne, to hear Dr. Edward C. Rosenow of the Mayo Clinic Foundation, of Rochester, Minnesota, talk on "Poliomyelitis." This special meeting was called in order to give the members an opportunity to hear Dr. Rosenow, who was in Fort Wayne making a study of the infantile paralysis epidemic.

At a meeting held by the members of the Fort Wayne Medical Society on October first in the Chamber of Commerce Building, Fort Wayne, fifty-six members were in attendance. Dr. John H. Warvel, of Indianapolis, discussed "The Treatment of Diabetes."

* * *

Fountain-Warren County Medical Society members met at the Mudlavia Sanitarium, Kramer, on October third. Dr. John H. Hewitt entertained the members and their wives at a turkey dinner. Guest speakers of the evening were Dr. Frank Cregor and Thomas A. Hendricks, both of Indianapolis. They talked on "United Efforts of the Medical Profession." Thirty-four members attended this meeting.

* * *

Grant County Medical Society and the Grant County Dental Society held a joint meeting at the New Marion Hotel, Marion, on September twenty-fifth. Dr. Frank Kanthak, of Chicago, was the guest speaker.

* * *

Hendricks County Medical Society held a meeting September twenty-third, at Danville, with twelve members present. Dr. Cyrus J. Clark, of Indianapolis, spoke on "Explanation in Relation to the Draft."

* * *

Howard County Medical Society held a meeting at the Frances Hotel, Kokomo, on October fourth. Dr. Carl P. Huber, of Indianapolis, had charge of the meeting.

* * *

Huntington County Medical Society members met at Hotel Lafontaine, Huntington, on October second. Dr. Thurman B. Rice, of Indianapolis, was the principal speaker, his subject being "Poliomyelitis." Fifteen members were in attendance.

Indianapolis (Marion County) Medical Society held a meeting at the Indianapolis Athletic Club on October first. Mr. Albert Stump, Indianapolis attorney, spoke on "Medical Cults Under the New Law."

* * *

La Porte County Medical Society met at the Sheridan Beach Hotel, Michigan City, on September nineteenth to hear Dr. Theodore K. Lawless, of Chicago, discuss "The Diagnosis and Treatment of Commoner Skin Diseases." Twenty-four members attended the meeting.

* * *

Madison County Medical Society held a meeting at St. John's Hospital, Anderson, on September sixteenth. Talks were made by Drs. William L. Sharp, Paul T. Lamey, Henry W. Gante, and George B. Metcalf, of Anderson, on "Infantile Paralysis."

* * *

Marshall County Medical Society members held a luncheon meeting at the Hi-Way Inn, Plymouth, on October second. Dr. Lawrence F. Fisher, of South Bend, was the guest speaker.

* * *

Montgomery County Medical Society held a meeting at the Crawford Hotel, Crawfordsville, on September nineteenth. This was the second in a series of lectures on obstetrics given by Dr. Carl Huber of Indianapolis. Twenty-one members and guests were present.

* * *

Rush County Medical Society held a meeting at the Lollis Hotel at Rushville, October tenth.

* * *

Tippecanoe County Medical Society held a meeting at the Lafayette Home Hospital, Lafayette, on October eighth. Fifty-five members were in attendance. Dr. Russell L. Haden of Cleveland, Ohio, discussed "Pathologic Hemorrhage and Blood Dyscrasias." Three cases were presented during a clinic held in the afternoon: Secondary Anemia with Pregnancy, Infectious Mononucleosis, and Rheumatic Arthritis.

* * *

Vigo County Medical Society met at the Union Hospital at Terre Haute on October first. A film entitled "Diagnostic Standards" was shown by the Vigo County Tuberculosis Society.

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THE JOURNAL
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DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

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THE THEORY AND PRACTICE OF THERAPEUTICS IN ALLERGY*

EDMUND L. KEENEY, M.D.†

BALTIMORE, MARYLAND

The two basic components of the allergic reaction are capillary permeability with interstitial edema and smooth muscle spasm. Regardless of the location of the allergic reaction, whether in the nose, the bronchi, or the skin, the underlying physiological pathology is identical.

The logical approach in combatting the clinical manifestations of allergy is to prevent the allergic reaction from taking place, and our most satisfactory method of reaching this goal is in the application of specific desensitization. Because of the rapid developments in the field of immunology this problem has been relegated to the allergists. However, the general practitioner, the internist, the otolaryngologist, and the dermatologist as well as the allergist are frequently confronted with allergic problems that must be treated symptomatically before specialized studies can be undertaken. The problem of providing symptomatic relief resolves itself into one which must combat the components of the allergic reaction, i. e., capillary permeability and smooth muscle spasm. The purpose of this paper is to discuss the symptomatic rather than the desensitization treatment. Because of the obvious magnitude of such a subject, I shall confine my remarks to the management of patients with hay fever, with bronchial asthma, and with poison ivy dermatitis.

THE TREATMENT OF HAY FEVER

In seasonal and perennial hay fever, the site of the allergic reaction is in the nose. Therapy for the most part should be directed toward combatting capillary permeability and interstitial edema. Smooth muscle spasm is not an important component of hay fever.

Inasmuch as capillary dilatation is probably the principal cause of increased capillary permeability in hay fever, vasoconstrictor drugs such as ephedrine, epinephrine, neosynephrine and benzedrine, employed in the nostril, are effective. Ephedrine and neosynephrine nose drops are commercially available in either aqueous or oily solution. Benzedrine is most efficaciously administered as an inhalant. We have found the following prescription containing epinephrine very satisfactory:

Nose drops.

Rx.	Cocaine hydrochloride	0.15 gm.
	Epinephrine hydrochloride (1:1000)	3.0 cc.
	Distilled water q. s.	15.0 cc.

Label: 1-3 drops in each nostril as necessary.

A small amount of cocaine is added to provide slight anesthesia of the nasal mucous membranes. Thus, annoying tickling sensations are counteracted and the sneezing paroxysms are diminished.

A similar prescription may be used in the eyes to combat the conjunctival irritation:

Eye drops.

Rx.	Cocaine hydrochloride	0.05 gm.
	Epinephrine hydrochloride (1:1000)	4.0 cc.
	Boric acid	0.5 gm.
	Rose water q. s.	16.0 cc.

Label: 1-2 drops in each eye when inflamed.

Some of the vasoconstrictor drugs may be given orally or parenterally. Ephedrine sulphate in doses of 25 milligrams administered orally every 4 hours is often beneficial. Epinephrine in oil[1] in doses of from 0.3-0.5 cc. administered subcutaneously has been found effective in relieving symptoms of hay fever for many hours. Although relief from the systemic administration of the vasoconstrictor drugs is not as immediate and dramatic as the relief which follows local application, the effectiveness is in turn more prolonged and any local irritation

* Read before the Section on Medicine of the Indiana State Medical Association, October 30, 1940, French Lick, Indiana.

† From the Protein Clinic, Department of Medicine, of the Johns Hopkins Medical School and Hospital.

[1] Keeney, E. L.: Epinephrine in Oil. Its Effect in the Symptomatic Treatment of Hay Fever. *J. Allergy*, **10**:590, 1939.

which may result from the constant application of nose drops is prevented.

In discussing methods to be employed in the systemic symptomatic treatment of hay fever, let us first consider measures which may prevent contact of antigen with antibody and therefore prevent the allergic reaction. In brief, this problem is one of preventing pollen from being inhaled by the patient. For this purpose various types of nasal filters have been exploited to the public. These filters have impressed me as being unsatisfactory inasmuch as they are annoying and unsightly to wear, difficult to fit and to keep in place, and ineffective in that small pollen grains are capable of entering the nostril about the filter pads.

The most satisfactory method of preventing contact with pollen is air-conditioning. There are many different types of apparatus manufactured by many companies, but the most satisfactory units are those that filter incoming air through "glass wool." It must be remembered that symptomatic relief can be obtained only while the patient is in the air-conditioned environment, and that symptoms will immediately recur as soon as exposure to the outside atmosphere is manifest. For the sufferer of hay fever, I know of no haven more comfortable than the neighborhood air-conditioned movie theater.

The therapeutic agent, par excellence, in hay fever, or in any disease of allergy, would be a drug that blocked the allergic reaction despite contact of antigen with antibody. It has been assumed that the allergic reaction is caused by the liberation of "H-substance" at the site of junction of antibody with antigen. This "H-substance" is similar to but not identical to histamine.

Best[2] demonstrated from the results of in vitro experiments that a histamine inactivating substance existed. Later Best and McHenry[3] proved the specificity of this inactivating substance for histamine and accordingly suggested that the inactivating substance be known as histaminase. Histaminase has now become a popular drug for clinical experimentation in allergic diseases and allied disorders, because of the possibility that it might inactivate "H-substance," in the human being. Recently, "Torantil" (trade name of the Winthrop Chemical Company for histaminase), has been made commercially available and has been widely advertised as a drug effective in the treatment of allergic diseases.

During the 1939 ragweed season, I studied[4] the effect of adequate daily oral doses of histaminase on 15 hay fever patients. Each patient gave a classical history of ragweed hay fever and each patient gave typical skin reactions to weak dilutions of giant and dwarf ragweed extract. Treatment was carried out for a period of 10-21 days, during which time the ragweed pollen concentration of the atmosphere was at its peak. None of the patients experienced relief of hay fever symptoms and any fluctuation in symptomatology that occurred was accounted for by a concomitant fluctuation in the pollen concentration of the atmosphere.

Before the onset of hay fever symptoms and, therefore, before the onset of histaminase therapy, each patient was skin tested intradermally with titrated doses of histamine. By this method of testing I hoped to determine the smallest amount of histamine to which each patient would react. I might add that most individuals will react with a wheal and a flare to 0.001 mg.; nearly all to 0.0001 mg.; a few to 0.00001 mg. and scarcely any to 0.000001 mg. of histamine base. The histamine skin tests were repeated the day histaminase therapy was stopped, and the results compared with those previously noted. No appreciable change in the histamine skin reaction was observed in any of the 15 patients. From these results it would be impossible to recommend the use of histaminase in the treatment of hay fever.

Mathison[5] in 1911, demonstrated that an intra-arterial injection of a potassium salt produced a marked rise in the blood pressure. McQuigan and Higgins[6] more recently claimed that it was necessary to have an increase in the serum potassium level before a rise in the blood pressure following epinephrine was possible. It was this probable physiological interrelationship between potassium and epinephrine that prompted the work of Rusk and Kenamore[7] on the effectiveness of potassium salts in urticaria and later Bloom[8] and Bloom and Grauman[9] on the effectiveness of potassium salts in hay fever. Although the latter authors commented upon the possible important role of the electrolyte pattern of the blood in allergic diseases, they failed to consider the significant part that potassium plays in the water balance of the body. Since edema is an important component of hay fever, the potassium salts and their effect on edema must be considered.

Potassium salts in the body are found primarily in the cells where they influence the amount of intracellular fluid. Sodium salts, on the other hand, play as important a role in their influence on the interstitial fluid. An increased intake of potassium salts should cause some shift of fluid from the interstitial spaces into the cells. It is conceivable that the small interchange of fluid that takes place

[2] Best, C. H.: Disappearance of Histamine from Autolysing Lung Tissue, *J. Physiol.*, **67**:256, 1929.

[3] Best, C. H., and McHenry, E. A.: Inactivation of Histamine, *J. Physiol.*, **70**:349, 1930.

[4] Keeney, E. L.: Histaminase in the Treatment of Hay Fever, *J.A.M.A.*, **114**:2448, 1940.

[5] Mathison, G. C.: The Effects of Potassium Salts upon the Circulation and Their Action on Plain Muscle, *J. Physiol.*, **46**:471, 1911.

[6] McGuigan, H. A., and Higgins, J. A.: Changes in the Circulatory Effect of Potassium Salts due to Epinephrine, *Am. J. Physiol.*, **114**:207, 1935.

[7] Rusk, H. A., and Kenamore, B. D.: Urticaria—A New Therapeutic Approach, *Ann. Int. Med.*, **11**:1838, 1938.

[8] Bloom, B.: Use of Potassium Salts in Hay Fever, *J.A.M.A.*, **111**:2281, 1938.

[9] Bloom B., and Grauman, S. J.: Potassium in Allergy, *Southwest Med.*, **23**:205, 1939.

in the body as the result of potassium administration might affect favorably very mild hay fever, but it would be impossible to believe that one might so alter the electrolyte pattern of the body by potassium administration as to shift all the interstitial fluid from the nasal mucous membranes.

Let me now cite some of the clinical results on the effectiveness of potassium salts in hay fever. Bloom[8] and Bloom and Grauman[9] administered from 0.32 gm. (5 gr.) to 0.65 gm. (10 gr.) of potassium chloride three times daily to 61 patients with hay fever and noted a satisfactory response in nearly all patients. In neither of these papers is there any evidence that they observed their patients with reference to the daily fluctuation of the pollen count or compared the symptoms of the treated patients with a control group. Such a careless method of investigation, regardless of results, is sufficient to produce an attitude of generalized skepticism. Since the appearance of Bloom's articles, Spain, Westcott and Gaillard[10], Miller and Piness[11], Kern[12], Harsch and Donovan[13], Furstenberg and Gay[14], and Rubin et al.[15], have conclusively demonstrated that not even a sizable minority of the patients with hay fever are benefitted by potassium salt therapy. In brief, scientific data like wine should not be used until properly aged.

THE TREATMENT OF BRONCHIAL ASTHMA

A discussion of the treatment of patients with bronchial asthma may be simplified by dividing the patients into 3 groups, viz.: (1) patients with mild bronchial asthma, (2) patients with moderately severe bronchial asthma, and (3) patients with severe bronchial asthma. The patients with severe bronchial asthma may be subdivided into 3 groups, (a) patients with acute severe bronchial asthma, (b) patients with intractable asthma ("status asthmaticus") and (c) patients with severe chronic bronchial asthma. It is important to remember that in bronchial asthma smooth muscle spasm as well as capillary dilatation and edema must be taken into account. (Table 1.)

Treatment of patients with mild bronchial asthma. These patients are symptomatically relieved by the single or repeated oral administration of ephedrine sulphate. A satisfactory scheme of treatment is to administer 0.025 gm. of ephedrine sulphate at the onset of asthma and repeat this dose every 15-20 minutes until relief is manifest or until 4 doses have been given. If the attacks of asthma appear sporadically throughout the day or night, doses of ephedrine sulphate may be administered regularly at 4 hour intervals. Because of the side reactions to ephedrine it is often desirable to give concomitantly a sedative and for the convenience of physicians ephedrine-amytal and ephedrine-nembutal capsules are made available by two of our well known drug houses. I have found the following prescription very effective:

Rx. Each capsule to contain:

Ephedrine sulphate	0.032 gm.
Aminophyllin	0.1 gm.
Caffeine (alkaloid)	0.05 gm.
Phenobarbital	0.032 gm.

Make 20 such capsules.
Label: 1 capsule as directed.

Treatment of patients with moderately severe bronchial asthma. When ephedrine sulphate is ineffective, the inhalation of vaporized epinephrine hydrochloride (1:100) through the mouth, from a specially prepared atomizer often provides relief. A satisfactory atomizer for this purpose is the DeVilbis No. 40. From 12-20 drops of epinephrine hydrochloride (1:100) are placed in the atomizer and while the bulb is vigorously squeezed the patient inhales the vapors of epinephrine. Relief is usually immediate. It is possible that the frequent use of epinephrine in this manner over a long period of time may be harmful to the patient. Galgiani et al[16] found that when the membranes of rabbits and cats were sprayed with epinephrine each day for three months, the trachea showed loss of cilia and desquamation of the epithelium. These observations by no means contraindicate the use of epinephrine inhalations, but they should encourage conservatism on the part of the physician when such therapy is recommended.

Treatment of patients with severe acute bronchial asthma. Epinephrine hydrochloride (1:1000) administered subcutaneously in doses of 0.3 to 0.5 cc. is usually effective in relieving, at least temporarily, a severe attack of asthma. Occasionally, it is necessary to administer repeated injections at 15 minute intervals. In a small group of patients, asthma persists despite intensive epinephrine therapy, and these patients are described as having intractable asthma. As a general rule, one may consider the asthma to be intractable if relief is not obtained from 4 injections of epinephrine hydrochloride given at 15 minute intervals. The treatment of intractable asthma will be considered later.

Although epinephrine hydrochloride is therapeutically beneficial in giving immediate relief from asthmatic symptoms, its duration of effectiveness is brief. This is so, because epinephrine hydro-

[10] Spain, W. C., Westcott, F. H., and Gaillard, G. E.: The Use of Potassium Chloride in the Treatment of Allergic Conditions, *J. Allergy*, **11**:388, 1940.

[11] Miller, H., and Piness, G.: Potassium Salts in Hay Fever, *J.A.M.A.*, **114**:1627, 1940.

[12] Kern, Richard: The Role of Water Balance in the Clinical Manifestations of Allergy, *Am. J. M. Sc.*, **199**:778, 1940.

[13] Harsch, G. F., and Donovan, P. B.: Potassium Chloride in Allergic Disorders, *J.A.M.A.*, **114**:1859, 1940.

[14] Furstenberg, F., and Gay, L. N.: Observations on the Ineffectiveness of Oral Administration of Potassium Chloride in Various Forms of Allergy, *Bull. Johns Hopkins Hosp.*, **68**:219, 1940.

[15] Rubin, S. S., Aaronson, A. L., Kaplan, M. A., and Feinberg, S. M.: Potassium Salts in the Treatment of Pollinosis, *J.A.M.A.*, **114**:2359, 1940.

[16] Galgiani, J. V., Proescher, F., Dock, W., and Tainter, M. L.: Local and Systemic Effects from Inhalation of Strong Solutions of Epinephrine, *J.A.M.A.*, **112**:1929, 1939.

Table 1

SYMPTOMATIC THERAPY FOR PATIENTS WITH VARIOUS TYPES OF BRONCHIAL ASTHMA

Degree of Bronchial Asthma	*Drug*	*Dosage*	*Technique of Administration*
Mild	Ephedrine sulphate	0.025 gm. (3/8 gr.)	Orally. a. One capsule every 15 min. until relief or until 4 doses have been given. b. One capsule every 4 hours if necessary
Moderately Severe	Epinephrine hydrochloride (1:100)	1.25 cc. (20 M)	Orally as Inhalant. Place epinephrine in nebulizer. Patient to inhale vapor as bulb is squeezed. Use as necessary.
Severe			
A. Acute	Epinephrine hydrochloride (1:1000)	0.3-0.5 cc. (5-8 M)	Subcutaneously. Give every 15 min. until relief or until 4 doses have been given.
	Epinephrine in oil	0.75-1.0 cc. (12-16 M)	Intramuscularly. Give as soon as relief is obtained from epinephrine hydrochloride.
	Sodium amytal	0.2 gm. (3 gr.)	Orally. One capsule as soon as relief from epinephrine preparations is manifest. Repeat in 2 hrs. if necessary.
	Schlesinger's solution	0.3-0.5 cc. (5-8 M)	Subcutaneously. Give instead of sodium amytal if patient is exhausted.
B. Intractable	Aminophyllin	0.45 gm. (7½ gr.)	Intravenously. Dilute to 10 cc. with normal saline. Inject slowly.
	Sucrose (50%) plus Epinephrine hydrochloride (1:1000)	100 cc.-200 cc. + 0.5 cc.-1.0 cc.	Intravenously. Inject slowly. Do not give by gravity. Use syringe.
	Oxygen		Tent.
	Helium 80% + Oxygen 20%		a. B. L. B. mask. For 1-2 hr. periods of administration. b. Special tent. For continuous administration.
	Ether + Olive oil (Equal parts)	60-120 cc. (2-4 ℥)	Rectally.
	Digitalis	0.1 gm. (1½ gr.) For each 10 lbs of body weight.	Orally or intramuscularly. Digitalize in 48 hrs. Give maintenance dose until patient is asymptomatic.
C. Chronic	Epinephrine in oil	1.0-1.5 cc. (16-24 M)	Intramuscularly. Give once, twice or three times daily as necessary.
	Sulfanilamide	2 gm. (30 gr.) Stat. 1 gm. q 6.hr.	Orally. Blood level of 10 mg. % to be attained.
	Sulfapyridine	4 gm. (60 gr.) Stat. 1 gm. q.6.hr.	Orally. Blood level of 5 mg. % to be attained.
	Sulfathiazole	4 gm. (60 gr.) Stat. 1 gm. q.6.hr.	Orally. Blood level of 5 mg. % to be attained.
	Digitalis	0.1 gm. (1½ gr.) For each 10 lbs. of body weight.	Orally. Digitalize in 4 days. Keep on maintenance dose.

chloride is rapidly absorbed and destroyed after its administration.

It is the rule rather than the exception for severe asthma to recur. Such recurrence of symptoms exaggerates the initial insult to the respiratory tree and prolongs the period of illness. Therefore, any therapeutic measure which will prevent recurrence of asthma and allow the patient rest and relaxation is highly desirable. The use of epinephrine in oil, a slowly absorbed preparation of epinephrine, is such a therapeutic measure.

The effectiveness of epinephrine in oil in the

treatment of acute bronchial asthma, is well established[17, 18, 19]. The dose is regulated according to the severity of the asthma and the patient's tolerance for epinephrine. As a general rule, 0.75 to 1.0 cc. is a sufficient and safe dose. In very severe asthma larger doses may be necessary.

Because epinephrine in oil is slowly absorbed, its effect is not manifest for 15 to 30 minutes after its injection. For this reason, it is advisable to administer beforehand an injection of 0.3 to 0.5 cc. of epinephrine hydrochloride (1:1000) to provide immediate relief of symptoms. Such a dose may be repeated every 15 minutes until relief is obvious or until 4 injections have been administered. When symptomatic improvement is apparent, an intramuscular injection of 0.75 to 1.0 cc. of epinephrine in oil should be given. If relief is not obtained from single or repeated injections of epinephrine hydrochloride, it is useless to administer epinephrine in oil.

The final step in treating the patient is the administration of a sedative. Any one of the various barbituric acid derivatives may be employed. If asthmatic symptoms have persisted a day or so and rest must be guaranteed, 0.3 to 0.5 cc. of Schlesinger's solution is permissible. (0.5 cc. of Schlesinger's solution contains 0.000125 gm. scopolamine hydrochloride, 0.01 gm. morphine hydrochloride, 0.015 gm. ethylmorphine hydrochloride [dionin].)

There is evidence [20] that patients with hypertension are not abnormally sensitive to epinephrine. On the other hand, there is evidence that an increase in the pulmonary CO_2 tension,[21] exercise,[22] and various psychic disturbances[23] may produce a rise in the blood pressure of hypertensive individuals. The asthmatic state incorporates all three of these factors. Theoretically, therefore, there is adequate cause for an increase in the blood pressure of hypertensive asthmatics if the dyspnea is allowed to persist. With these facts in mind, it becomes obvious that hypertensive asthmatics must be relieved of their asthma and that the cautious use of epinephrine is not contraindicated. In my clinical experience there has been a fall of the blood pressure in such patients, concomitant with the onset of relief from asthma, brought about by epinephrine.

Treatment of patients with intractable asthma. The patient with intractable asthma ("status asthmaticus") presents an acute medical emergency for which there is no entirely effective therapeutic measure. Many different schemes of treatment, wholly unrelated, have been suggested as being worthy of trial. Any form of therapy that will relieve the grave respiratory distress immediately, even though only occasionally or temporarily, may be life saving.

The bronchi and bronchioles, in bronchial asthma, are partially obstructed by exudate, by muscular contraction, and by swelling of the mucosa. This partial obstruction is more marked in intractable asthma. The difference in degree of obstruction is probably due to an increase in the exudate and in the swelling of the mucosa. Therapy should be directed toward the alleviation of the obstruction and the assurance of adequate pulmonary ventilation.

It is necessary for the patient to relieve himself of the exudate by coughing. Epinephrine, because of its constrictive effect on the blood vessels, and its dilating effect on the smooth musculature of the bronchial tree, affords relief in the ordinary attack of asthma. Epinephrine is inefficient in intractable asthma and the patient, therefore, is commonly considered to be "epinephrine-fast." However, it is more logical to assume that the bronchial and bronchiolar obstruction has developed to such a degree that epinephrine alone is insufficient.

The mucosal swelling should be lessened by increasing the osmotic pressure in the circulating blood with some hypertonic solution, thereby drawing the excess fluid from the bronchial mucous membranes into the blood stream. For this purpose a hypertonic solution of glucose, sodium chloride, or sucrose may be employed. The osmotic effect of such substances as glucose and sodium chloride which pass through the capillary wall with ease, is curtailed by diffusion. Sucrose, because its molecules are larger and less diffusible, remains in the blood stream a longer time after injection. Sucrose, furthermore, is not broken down to any significant extent or utilized as is glucose; nor is it stored in the tissues as is sodium chloride.[24]

Keeney[25] administered intravenously 100 cc. of 50 per cent sucrose to which was added 0.5 cc. of 1:1000 epinephrine hydrochloride, to patients with intractable asthma and obtained relief of symptoms for 1 to 3 hours. Although asthma recurred, the symptoms were adequately controlled by injections of epinephrine hydrochloride. Prior to the admin-

[17] Keeney, E. L.: A Slowly Absorbed Epinephrine Preparation. Preliminary report, *Bull. Johns Hopkins Hosp.*, **62**:227, 1938.

[18] Keeney, E. L., Pierce, J. A., and Gay, L. N.: Epinephrine in Oil. A New, Slowly Absorbed Epinephrine Preparation, *Arch. Int. Med.*, **63**:119, 1939.

[19] Keeney, E. L.: Epinephrine in Oil. Its Effectiveness in the Symptomatic Treatment of Bronchial Asthma, *Am. J. M. Sc.*, **198**:815, 1939.

[20] Elliott, A. H., and Nuzum, F. R.: Cardiovascular Response to the Subcutaneous Injection of Epinephrine and Pituitrin in Essential Hypertension, *Am. J. M. Sc.*, **189**:215, 1935.

[21] Raab, W.: Die Benziehungen zwischen CO_2 Spannung und Bluldruck bie Normalen und Hypertonikern, *Ztschr. f.d. ges. esper. Med.*, **68**:337, 1929.

[22] Barath, Eugene: Arterial Hypertension and Physical Work, *Arch. Int. Med.*, **42**:297, 1928.

[23] O'Hare, J. P.: Vascular Reactions in Vascular Hypertension, *Am. J. M. Sc.*, **159**:269, 1920.

[24] Bullock, L. T., Gregerson, M. L., and Kinney, R.: The Use of Hypertonic Sucrose Solution Intravenously to Reduce Cerebrospinal Fluid Pressure without a Secondary Rise, *Am. J. Physiol.*, **112**:82, 1935.

[25] Keeney, E. L.: The Effectiveness of Intravenous Hypertonic Sucrose and Adrenalin in the Treatment of Status Asthmaticus, *J. Allergy*, **9**:487, 1938.

istration of the sucrose and epinephrine this had not been possible.

Untoward reactions following the administration of sucrose and epinephrine, such as carpo-pedal spasm, pain behind the eyes, nausea and nervousness have occurred only when the mixture was administered too rapidly.

The first extensive clinical report on the effectiveness of intravenous aminophyllin in the treatment of intractable asthma was published by Hermann and Aynesworth in 1937.[26] They administered 0.48 gm. of aminophyllin diluted to 10 cc. of normal sodium chloride solution to 16 patients on 41 different occasions. Thirty-one of the 41 injections afforded prompt, complete and persistent relief. The intravenous injection of aminophyllin should be made slowly. Reactions such as a feeling of heat, a burning in the eyes, a sense of constriction in the chest, nausea and vomiting, and at times convulsions and coma may occur. Also, the solution may sclerose veins or cause excruciating pain, should it get under the skin. It is important to emphasize that the mode of action of aminophyllin on the respiratory tree has not been scientifically established. Be this as it may, the results obtained by this method of treatment have been sufficiently encouraging to warrant its empirical usage.

Patients with intractable asthma in whom the bronchial and bronchiolar obstruction is extensive, develop signs of carbon dioxide retention and anoxia.[27] The degree of cyanosis and polycythemia roughly parallels the degree of oxygen unsaturation of the arterial blood. The cyanosis is often enhanced by a dilatation of the peripheral capillaries and venules. The slowing of the general circulation may, in turn, intensify the anoxia and carbon dioxide retention.

Anoxia often causes the respiratory center to be more sensitive to changes in the hydrogen-ion concentration of the blood. Hyperpnea represents an attempt on the part of the body to rid itself of excess carbon dioxide. This is not immediately accomplished in patients with intractable asthma and as a result the respiratory distress becomes violent. If anoxia persists there is finally exhaustion of the center with concomitant development of rapid and shallow breathing. As shallow breathing is not only a result but also a cause of oxygen want, a dangerous cycle is produced.[27]

The inhalation of an atmosphere of 100 per cent oxygen is usually effective in combating anoxia. Barach[28, 29, 30, 31, 32] has demonstrated that a mixture of 80 per cent helium and 20 per cent oxygen is inspired and expired with greater ease than an atmosphere of 100 per cent oxygen. Therefore, it is conceivable that the state of oxygen want may be relieved more satisfactorily by employing helium and oxygen.

In bronchial asthma there is inspirational as well as expirational difficulty. Moore and Binger[33, 34] and Kernan and Barach[35] have demonstrated that when dogs are made to inspire against resistance, there develops a progressive increase in the intrapleural negative pressure; whereas, when dogs are made to expire against resistance, only insignificant changes in the intrapleural pressure occur. The pathological changes in the lungs of dogs that expire against resistance are minimal. On the other hand, severe pulmonary edema at the hilar and basal regions, and peripheral emphysema occur in the lungs of dogs that inspire against resistance.

In patients with bronchial asthma the intrapleural negative pressure may be from 7 to 10 times the normal value. The effect of the increased intrapleural pressure is to exert a sucking action on the capillaries lining the bronchiolar and alveolar walls. The result is exudation of edematous fluid. Barach[28-32] has demonstrated that there is a definite lowering of the intrapleural negative pressure following the inhalation of a mixture of 80 per cent helium and 20 per cent oxygen. Therefore, the administration of a mixture of helium and oxygen to the patient with intractable asthma is physiologically sound.

Generally speaking there are two types of apparatus for the administration of helium and oxygen. One type is the mask or mouthpiece apparatus of which the recently developed Bubulian, Lovelace and Boothby[36] mask is a fine example. This mask may be used for 1 to 3 hour periods of administration. It does not provide a means of rebreathing helium to prevent the loss of this valuable gas. The other type of apparatus is the more expensive

[26] Hermann, G., and Aynesworth, M. B.: Successful Treatment of Persistent Extreme Dyspnea, "Status Asthmaticus", *J. Lab. and Clin. Med.*, **23**:135, 1937.

[27] Meakins, J. C., and Davies, H. W.: Respiratory Function in Disease. London (Oliver and Boyd), 1925, p. 195.

[28] Barach, A. L.: Effects of Inhalations of Helium Mixed with Oxygen on the Mechanics of Respiration, *J. Clin. Investigation*, **15**:47, 1936.

[29] Barach, A. L.: The Therapeutic Use of Helium, *J.A.M.A.*, **107**:1273, 1936.

[30] Barach, A. L.: The Use of Helium in the Treatment of Asthma and Obstructive Lesions of Larynx and Trachea, *Ann. Int. Med.*, **9**:729, 1935.

[31] Barach, A. L., Martin, J., and Eckman, M.: Positive Pressure Respiration and its Application to the Treatment of Acute Pulmonary Edema and Respiratory Obstruction, *J. Clin. Investigation*, (Proceedings) **16**:664, 1937.

[32] Barach, A. L.: Recent Advance in Inhalation Therapy and Treatment of Cardiac and Respiratory Disease—Principles and Methods, *New York State J. Med.*, **37**:1095, 1937.

[33] Moore, R. L., and Binger, C. A. L.: Observations on Resistance to the Flow of Blood to and from the Lungs, *J. Expr. Med.*, **45**:655, 1927.

[34] Moore, R. L., and Binger, C. A. L.: The Response to Respiratory Resistance: A Comparison of the Effects Produced by Partial Obstruction in the Inspiratory and Expiratory Phases of Respiration, *J. Exper. Med.*, **45**: 1065, 1927.

[35] Kernan, J. D., and Barach, A. L.: Role of Helium in Cases of Obstructive Lesions in the Trachea and Larynx, *Arch. Otolaryng.*, **26**:419, 1937.

[36] Lovelace, W. R.: *Proc. Staff Meet., Mayo Clin.*, **13**:790, 1938.

tent-like equipment which was developed by Barach and his co-workers.[28-32] With this apparatus the helium and oxygen may be administered continuously and the helium can be rebreathed. Another advantage of this more refined equipment is that the helium-oxygen mixture can be given under positive pressure. It is important to add that an ordinary oxygen tent cannot be used for the continuous administration of helium for there are too many opportunities for nitrogen to replace helium even in the best of such tents.

It has been our practice to digitalize patients with intractable asthma. Digitalization should be carried out in 24-48 hours. A maintenance dose of digitalis may then be provided until the asthmatic symptoms have subsided.

Physical rest and sleep, if possible, are highly desirable. Unfortunately, the ordinary sedatives employed in treating patients with acute asthma are ineffective. Opiates depress the respiratory center and for this reason alone should not be administered. Maytum[37] first suggested the rectal instillation of equal parts of ether and olive oil. Sleep and relaxation can frequently be obtained by administering from 60 to 120 cc. of such a mixture.

Treatment of patients with severe chronic bronchial asthma. There is a large group of patients who, despite thorough allergic survey, eradication of infection, and surgical removal of nasal lesions, have daily recurring attacks of asthma. To obtain relief these patients resort to frequent daily and nocturnal injections of epinephrine hydrochloride. A method of therapy which will lessen the number of injections and provide the patient with more prolonged relief attracts the attention of both the patient and the physician.

It has been adequately demonstrated[17, 18, 19] that epinephrine in oil provides relief from asthmatic symptoms in patients with chronic bronchial asthma for periods of 8 to 16 hours. Patients who had previously been taking frequent injections of epinephrine hydrochloride were able to receive more prolonged relief from fewer injections of epinephrine in oil.

One cc. of epinephrine in oil is usually a safe initial dose for a patient who is accustomed to frequent injections of epinephrine hydrochloride. Subsequently, the dose may be increased or decreased depending upon the patient's response. One patient may be made comfortable with 0.75 cc., while another may require 2.0 cc. Because so much can be gained by providing uninterrupted rest, it is preferable to administer the initial injection in the evening. Later a morning and even a noon injection may be added if necessry. As symptomatic improvement becomes apparent it is possible to decrease the number of injections and reduce the dose to that amount which will maintain relief from symptoms. If asthma is present at the time when epinephrine in oil is administered, an injection of epinephrine hydrochloride beforehand is advisable to provide immediate relief of symptoms. When frequent consecutive administrations of epinephrine in oil are to be given, it is preferable to make the injections intramuscularly in the deltoid or gluteal muscles.

For the past 13 years the medical literature has contained fairly optimistic reports by Taylor,[38] Fink,[39] Anderson,[40] Cole and Harper,[41] Balyeat and Seyler,[42] Mandelbaum[43] and others on the effectiveness of the intratracheal injection of iodized oils in the treatment of bronchial asthma. To instill the oil, two instruments, the bronchoscope and the laryngeal syringe, have been used. The benefit is supposed to be due to the mechanical displacement of mucous by oil, thereby allowing the patient better bronchial drainage.

Recently, an excellent report by Criep and Hampsey[44] has called attention to an increasing skepticism concerning the value of this method of treatment. They reported on a total of 267 cases of bronchial asthma treated with iodized oil by many physicians interested in this type of therapy. Of this group there was absolute failure to obtain relief in 73.4 per cent of the patients, improvement in 24.7 per cent, and a cure in 1.9 per cent. Untoward effects, such as allergic reactions to the iodine and poppyseed oil, circulatory failure, spread of infection and damage of lung tissue, contributed disadvantages which prevented its wholehearted acceptance. From such a report, one must conclude that only a small percentage of a well selected group of patients with severe chronic bronchial asthma can expect temporary benefit from the use of intratracheal injections of iodized oils.

The interest of physicians in chemotherapy has become revitalized with the introduction of sulfanilamide, sulfapyridine, and sulfathiazole. Although these drugs do not hold an important rank in the therapeutic armamentarium of allergy, there is a definite place for their use in patients with infectional bronchial asthma. In speaking of patients with infectional bronchial asthma, I refer to those whose symptoms are associated with upper respira-

[37] Maytum, C. K.: Bronchial Asthma: Relief of Prolonged Attack by the Colonic Administration of Ether, *M. Clin. North America*, **15**:201, 1931.

[38] Taylor, J. H.: Treatment of Asthmatic Bronchitis with Iodized Oil, *Minnesota Med.*, **15**:408, 1932.

[39] Fink, L. W.: Lipiodal as Therapeutic Agent, *Minnesota Med.*, **15**:522, 1932.

[40] Anderson, W.: Some Observations on the Value of Intratracheal Injection of Iodized Oil for Bronchial Asthma, *J. Allergy*, **4**:44, 1932.

[41] Cole, D. B., and Harper, E. C.: Therapeutic Use of Iodized Oil in Pulmonary Disease, *J. Lab. and Clin. Med.*, **18**:704, 1933.

[42] Balyeat, R. M., and Seyler, L. E.: The Therapeutic Value of the Intratracheal Use of Iodized Oil in Bronchial Asthma, *J. Lancet.*, **54**:563, 1934.

[43] Mandelbaum, W. J.: Asthma: Treatment by Intratracheal Injection of Iodized Oil, *M. Clin. North America*, **20**:907, 1936.

[44] Criep, L. N., and Hampsey, J. W.: Therapeutic Value of Iodized Oil in Bronchial Asthma, *J. Allergy*, **9**:23, 1937.

tory infections and those who later develop a chronic infection in the lower respiratory tract.

The effectiveness of sulfanilamide is limited to infections produced by Lancefield's Group A, B, and C strains of the hemolytic streptococcus by the salivarius and mitis strains of the alpha hemolytic streptococcus, by the meningococcus, by the gonococcus, by the clostridium welchii, by bacterium coli and by proteus vulgaris. Sulfapyridine is most effective in infections produced by the pneumococcus and sulfathiazole promises to combat infections produced by the staphylococcus more efficiently than sulfapyridine.

Before prescribing one of these drugs it is necessary to determine the character of the bacterial flora of the bronchial tree. This can be accomplished by making several cultures of the sputum. If there is an infection in the upper respiratory tract, cultures should be made from the site of infection in this region.

There is no complete unanimity of opinion as to what constitutes the best system of establishing proper dosages. The main index for the control of therapy with these drugs should be the concentration obtained in the blood. Concentrations of 10 mg. or more of sulfanilamide for each hundred cubic centimeters of blood is necessary before a proper therapeutic response can be anticipated. The concentration of sulfapyridine and sulfathiazole should attain approximately 5 mg. for each hundred cubic centimeters of blood.

It is difficult to decide just how long these drugs should be administered to the asthmatic patients. If there are signs of improvement and no indication of toxic manifestation the proper blood levels should be maintained for several months.

No patient should be treated with either of these drugs unless arrangements are made for daily attention by a physician. Furthermore, it is advisable that a hemoglobin determination, a white blood cell count, and a microscopic examination of the urine be made every forty-eight hours. If toxic manifestations occur the drug must be stopped immediately. Administration should not be attempted a second time as more serious toxic reactions are liable to develop.

It is yet too early to submit statistical evidence of the effectiveness of sulfanilamide, sulfapyridine or sulfathiazole in patients with infectional bronchial asthma. It must suffice at this moment to state that some encouraging results have been obtained in a very small group of well chosen patients.

There is a small group of patients with chronic bronchial asthma who fail to obtain relief from any method of medical treatment. In an attempt to offer such patients relief, surgeons have focused their attention upon the surgery of the extrinsic pulmonary nerve supply, and as a result various operative procedures have been advanced.

Kummell[45, 46] made the first venture in this field by performing a unilateral cervical sympathectomy. He was aware of the important part played by the vagus, but was afraid to sever this nerve. Leriche and Fontaine[47, 48, 49] a little later, and again more recently reported upon the results they had obtained by removing the stellate ganglion on one side. Kappis[50] reported encouraging results obtained by cutting one vagus just below the point of emergence of the recurrent laryngeal nerve. Therefore, equally good results have been reported to follow the interruption of two different pathways, the sympathetic and the parasympathetic, which possess actions antagonistic to each other. An attempt was made to account for these curious results on the basis of a reflex arc, of which the sympathetic fibers made up the afferent and the vagus fibers the efferent neurones. Kummell,[51, 52] in 1926, sectioned the posterior pulmonary plexus on one side, and thereby removed all the extrinsic nerve supply to one lung. Phillips and Scott[53] reviewed the literature in 1929, and endorsed Kummell's operation and reported a case of their own. Levin,[54] in 1935, suggested alcoholic injection of the upper thoracic sympathetic ganglia. Recently, Reinhoff and Gay[55] reported encouraging results following bilateral resection of the posterior pulmonary plexus.

This small group of surgeons represents only the pioneers and the originators of their respective operative procedures. It is necessary to call attention to the fact that despite the type of operation, all procedures have been reported to have brought about some brilliant results. Furthermore, one need only to read over carefully the numerous publications to become aware of the large number of complete failures. It is impossible to advocate one operation by relying entirely upon reported results. If one were to approach the evaluation of these various procedures on purely theoretical grounds

[45] Kümmell, N., Sr.: Die operative Heilung des Asthma bronchiale, *Klin. Wchnschr.*, **2**:1835, 1923.

[46] Kümmell, N., Sr.: Zur chirurgischen Behandlung des Asthma bronchiale, *Arch. f. klin. Chir.*, **127**:716, 1923.

[47] Leriche, R., and Fontaine, R.: Resultats etiognes due traitment chirurgical de l'asthma bronchique, *Bull. et mem. Soc. nat. de chir.*, **54**:660, 1928.

[48] Leriche, R., and Fontaine, R.: Position Actuelle de la question du traitment chirurgical de l'asthma bronchique, *Arch. Med-Chir. de l'app. Respir.*, **4**:1, 1928.

[49] Leriche, R., and Fontaine, R.: Les resultats eloignes du traitment chirurgical de l'asthme bronchique par la stellectomy, *Presse Med.*, **47**:241, 1939.

[50] Kappis, M.: Die Frage der operativen Behandlung des Asthma bronchiale, *Med. Klin.*, **20**:1347, 1924.

[51] Kümmell, N., Sr.: Ursache der Misserfolge bie operativen Behandlung des Bronchialasthma und ihre Beseitigung, *Arch. f. klin. Chir.*, **142**:449, 1926.

[52] Kümmell, N., Sr.: Die Ursache von Misserfolge bei Asthmaoperationen und ihre Verhutung, *Centralbl. f. Chir.*, **53**:1278, 1926.

[53] Phillips, E. W., and Scott, W. J. M.: The Surgical Treatment of Bronchial Asthma, *Arch. Surg.*, **19**:1425, 1929.

[54] Levin, G. L. L.: The Treatment of Bronchial Asthma by Dorsal Smypathectomy, *Ann. Surg.*, **102**:161, 1935.

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based upon our present day knowledge of the anatomy and physiology of the autonomic nerve supply to the lungs, none would be forced to choose the operation suggested by Reinhoff and Gay. It is only logical to believe that if interruption of either the sympathetic or vagus is sometimes effective, sometimes ineffective, sometimes partially beneficial, a combination of these procedures might offer even better results. Furthermore, bilateral interruption of these tracts should offer greater improvement than unilateral interruption. Unfortunately, there is more than theory to consider. The operation as suggested by Reinhoff and Gay is a drastic procedure which should be attempted only by a skilled surgeon possessing a profound knowledge of operative details. The physician must remain ever critical; he must realize that established anatomical changes are likely to be erased by lung denervation; and he must bear in mind that bronchospasm may theoretically occur, even after section of both the posterior pulmonary plexuses, by stimulation of the ganglia in the bronchi through an intrapulmonary reflex arc.

THE TREATMENT OF POISON IVY DERMATITIS

Rhus toxicodendron radicans and rhus toxicodendron diversiloba are regarded by the laity and medical profession with aversion. Their deleterious character is represented by the names of poison ivy and poison oak. The difference between these two plants is so small that their proper classification forms a bone of contention between botanists. The only botanical ground for the separation of the two into different species is a very slight difference in the shape of the leaflet. I am positive that not one of us could tell one from the other. It is fortunate, therefore, to learn that rhus toxicodendron diversiloba, or poison oak, inhabitats the western coastal region, whereas rhus toxicodendron radicans, or poison ivy, is found chiefly on the eastern seacoast and in the Middle West.

The dermatitis which the sap of these plants produces is pathologically and clinically indistinguishable. It is not known whether the specific sensitizing substance from poison ivy is identical with that of poison oak or whether prophylactic treatment for one protects for the other. However, since rhus dermatitis for us is essentially poison ivy dermatitis, I shall confine my remarks to this particular skin lesion.

Contact with the sap of the poison ivy plant must occur before dermatitis develops. There is no evidence at this time to support the fact that susceptibility to the dermatitis is inherited as a constitutional trait. But it is impossible to conclude that contact alone determines sensitivity for it is common knowledge that some individuals regardless of frequency or extent of exposure are more susceptible than others.

Care must be taken in making a diagnosis of poison ivy dermatitis. The skin lesions produced by the sap of the poison ivy plant are no different



Fig. 1. The technic of patch testing: A. The extract is applied with a rod 2 mm. in diameter. B. The area is covered with a small piece of cotton. C. The "patch" is applied.

than those produced by the sap from other plants. Tomato vines, tulip bulbs, primroses, clematis vines, sumac and many other plants produce lesions indistinguishable from poison ivy. Some clue may be obtained from a careful history. The fact that the poison ivy plant is by far the most common irritant is helpful. The "patch test" provides a fairly suitable method of establishing a diagnosis. The technique of "patch" testing is simple. A small quantity of the extract of poison ivy leaves is placed upon the skin of the volar surface of the forearm. The extract is covered by a small piece of cotton and the "patch" is applied (Fig. 1). After seventy-two hours the patch may be removed and the results are noted. A positive reaction is indicated by the presence, at the site of testing, of an erythematous area in which vesicles of varying size are present. The most typical reaction is one which reproduces poison ivy dermatitis. Negative reactions show no change at the site of the "patch" (Fig. 2).

Last year I examined all the medical students at the Johns Hopkins School of Medicine. Approximately 50 per cent gave a history of having had poison ivy dermatitis. Ninety per cent of these gave a positive patch test to an ether extract prepared from the green leaves of the poison ivy plant. It is unfortunate that the commercial houses that prepare extracts for the treatment and prevention of poison ivy dermatitis do not enclose in their packages suitable material for patch testing.

The virulency of the poison ivy plant, i. e., its liability to produce dermatitis, varies with the different seasons of the year in accordance with the

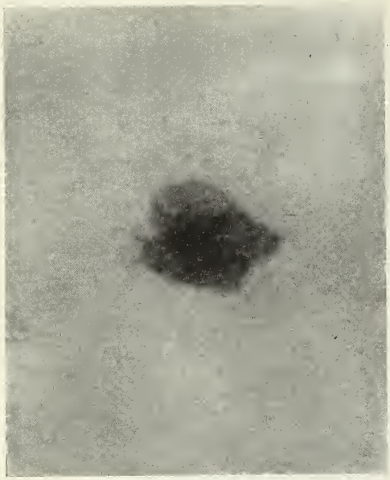


Fig. 2. The appearance of a positive "patch" test, 72 hours after the application of a small quantity of the ether extract of fresh poison ivy leaves.

stage of growth of the leaves, stems, and flowers. In the spring when the first leaves of the plant are unfolding, the resin canals are engorged and easily injured. They are then more liable to produce a dermatitis should contact with a susceptible individual occur. The plants that grow in the shade have a weaker structure than those that form in the sun. From this fact one might suppose that contact with the shaded plants may be more deleterious than contact with the plants growing in the open. Of the autumn leaves, the red are less poisonous than the yellow and when the leaves have finally withered and fallen they are non-poisonous. The stems of the plant retain a small amount of sap during the winter months and contact of a susceptible individual with the stem will produce a dermatitis. Although the prevalence of poison ivy dermatitis is greatest during the spring and summer months, its occurrence during the fall and winter months is possible.

A discussion on the treatment of poison ivy dermatitis is simplified by considering first the symptomatic therapy and then the specific therapy.

By symptomatic therapy, I refer to the alleviation of the acute dermatitis and the concomitant symptoms that follow the incubation period, after contact with the poison ivy plant has occurred. The incubation period may vary from twenty-four hours to fourteen days.

There is no disease for which so many different remedies have been advocated. McNair[56] devotes seven pages in his book for the listing of so-called "cures" and "remedies." This undoubtedly produces a feeling of uncertainty in the physician's mind. Actually, once the dermatitis is present, the treatment is no different than that for any other type of an acute dermatitis. I have summarized a satisfactory scheme of therapy in Table 2. It is necessary to emphasize that vesicular and weeping lesions should not be covered by lotions and salves because of the likelihood of establishing a secondary infection.

In Table 3, there are listed the preparations available to the medical profession for the specific treatment and prevention of poison ivy dermatitis. One cannot avoid being a little puzzled and also a little skeptical at the lack of uniformity of preparation and of dosage advised. This state necessarily exists because the specific sensitizing substance of the poison ivy plant has never been isolated. However, the irritating substance is supposedly soluble in a fat solvent and whether or not this substance is more soluble in acetone, ether, benzin, toluene, or alcohol has not been determined.

From the results of a survey that I have been conducting for the City of Baltimore, I had hoped, at this time, to introduce to you a new preparation for the specific treatment of poison ivy. I had hoped, also, to be able to give you some idea of the respective merits of the commercial preparations. However, the time at my disposal prevents such a detailed report which in the end might lead to more confusion. It must suffice to state that encouraging results have been reported for the various commercial preparations by such reputable workers as Strickler,[57] Spain and Cook,[58] Molitch and Paliakoff,[59] Gowen,[60] and Blank and Coca.[61]

The scientific achievements in research on poison ivy dermatitis have failed to pace that in other branches of medicine. The cause for this, perhaps, is a lack of general interest on the part of investigators, for what is supposedly a prosaic and commonplace entity. Nevertheless, this commonplace ailment holds forth for the interested and practical-minded worker, renown such as can hardly be offered by any of our more coddled syndromes. Would it not be gratifying to isolate the specific sensitizing substance from the poison ivy plant?

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[57] Strickler, Albert: The Value of the Toxin (Antigen) of Rhus Toxicodendron and Rhus Venenata in the Treatment and Desensitization of Patients with Dermatitis Venenata, *J.A.M.A.*, **80**:1588, 1923.

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[59] Molitch, Matthew, and Paliakoff, Samuel: Prevention of Dermatitis Venenata Due to Poison Ivy in Children, *Arch. Dermat. and Syph.*, **33**:725, 1936.

[60] Gowen, G. H.: Treatment and Prevention of Rhus Toxicodendron Poisoning, *J. Allergy*, **4**:519, 1932.

[61] Blank, J. M., and Coca, A. F.: Study of the Prophylactic Action of an Extract of Poison Ivy in the Control of Rhus Dermatitis, *J. Allergy*, **7**:552, 1935.

TABLE 2

THE SYMPTOMATIC TREATMENT OF POISON IVY DERMATITIS

CHARACTER OF LESION	MEDICATION	TECHNIQUE OF ADMINISTRATION
VESICLES ON FACE	SATURATED BORIC ACID SOLUTION	SOLUTION TO BE ICED. COMPRESS. CHANGE COMPRESSES EVERY 15 TO 30 MINUTES. CONTINUE UNTIL LESIONS ARE DRY
VESICLES ON EXTREMITIES OR TORSO	SATURATED ALUMINUM ACETATE SOLUTION	ONE TABLESPOONFUL TO ONE PINT ICED WATER. COMPRESS. CHANGE COMPRESSES EVERY 15 TO 30 MINUTES. CONTINUE UNTIL LESIONS ARE DRY.
DRY LESIONS ON FACE, EXTREMITIES OR TORSO	℞ ZINC OXIDE 15.0 ℥ss STARCH 15.0 ℥ss LIQ. CARBONIS DETERGENS 1.0 ♏xv PHENOL 1.0 ♏xv ETHYL ALCOHOL (70%) 60.0 ℥ii DISTILLED WATER q.s. 180.0 ℥vi	APPLY OVER AFFECTED PARTS AS DESIRED

Would there not be pleasure in the discovery of some chemical agent which when applied locally would neutralize the sensitizing substance of the poison ivy plant after contact had been consummated? When these problems are solved, the skepticism and the uncertainty that enshrouds any discussion on poison ivy dermatitis will remain forever unwritten.

SUMMARY

The two basic components of the allergic reaction are capillary permeability with interstitial edema and smooth muscle spasm. The symptomatic treatment of allergic diseases should be directed toward the combating of these components. The treatment of patients with hay fever, bronchial asthma and poison ivy dermatitis is discussed.

Smooth muscle spasm is not an important component of hay fever. Because capillary dilatation precedes capillary permeability, such vasoconstrictor drugs as epinephrine, ephedrine, neosynephrine, and benzedrine are effective when used in the nostril. Ephedrine sulphate administered orally in doses of 0.025 gm. every four hours frequently relieves hay fever symptoms for a prolonged period. Epinephrine in oil administered subcutaneously in doses of from 0.3 to 0.5 cc. often gives relief from hay fever symptoms for many hours. Nasal filters are not satisfactory means of filtering pollen from the atmosphere. Air-conditioning units that employ filter pads of "glass wool" provide relief from symptoms only while patients are in the air-conditioned environment. Histaminase is ineffective in

TABLE 3

PREPARATIONS FOR THE SPECIFIC TREATMENT & PREVENTION OF POISON IVY DERMATITIS

PREPARATION AND MANUFACTURER	NAME OF PRODUCT	EXTRACTED WITH	EXTRACTED FROM	DISSOLVED AND PUT UP FOR INJECTION IN	DOSAGE FOR TREATMENT	DOSAGE FOR PREVENTION
 LEDERLE LABORATORIES	POISON IVY EXTRACT	ACETONE	FRESH LEAVES	ALMOND OIL	1 C.C. (1.M.) ONE OR MORE REPEAT INJECTION EVERY 24 HRS. IF NECESSARY	1 C.C. (1.M.) REPEAT INJECTION ONE WEEK LATER
 MULFORD COLLOID LABORATORIES	RHUS TOX. ANTIGEN - STRICKLER	ETHYL ALCOHOL	FRESH LEAVES	35% ETHYL ALCOHOL	0.5 TO 1 C.C. (1.M.) SUBSEQUENTLY 1 C.C. EVERY 12 TO 24 HRS. IF NECESSARY	0.5 TO 1 C.C. (1.M.) SUBSEQUENTLY, 1 C.C. EVERY WEEK FOR 2 TO 3 WEEKS
 PARKE, DAVIS & COMPANY	POISON IVY EXTRACT	TOLUENE THEN ETHYL ALCOHOL	FRESH LEAVES	ALMOND OIL	1 C.C. (1.M.)	1 C.C. (1.M.) REPEAT INJECTION WEEKLY UNTIL 3 DOSES ARE GIVEN
 SHARP AND DOHME	IVYOL (POISON IVY EXTRACT)	BENZIN	FRESH LEAVES	OLIVE OIL	0.125 TO 0.5 C.C. (1.M.) SUBSEQUENTLY 0.5 C.C. EVERY 24 HRS. IF NECESSARY	0.5 C.C. (1.M.)
 E.R. SQUIBB AND SONS	POISON IVY EXTRACT FOR: 1- SEASONAL ℞ 2- PRESEASONAL ℞	ETHYL ALCOHOL	DRIED LEAVES	ETHYL ALCOHOL (ABSOLUTE)	0.1 C.C. DILUTED TO 1 C.C. WITH SALT SOLUTION (S.C.) REPEAT EVERY 24 TO 48 HRS. UNTIL 2 TO 5 DOSES ARE GIVEN	GRADUATED DOSES AT WEEKLY INTERVALS FOR ABOUT 20 WEEKS (S.C.)

alleviating symptoms of hay fever. Potassium salts, likewise, are not efficacious.

A discussion of the symptomatic treatment of patients with bronchial asthma is simplified by dividing the patients into three groups, namely, (1) patients with mild bronchial asthma, (2) patients with moderately severe bronchial asthma, and (3) patients with severe bronchial asthma. The patients with severe bronchial asthma may be subdivided into three groups, namely, (a) patients with acute severe bronchial asthma, (b) patients with intractable asthma, and (c) patients with chronic severe bronchial asthma.

Patients with mild bronchial asthma are often symptomatically relieved by the oral administration of ephedrine sulphate, which may be given in doses of 0.025 gm. every fifteen minutes until four doses are given or until relief is obtained. If asthma occurs sporadically throughout the day, ephedrine sulphate should be given regularly at four-hour intervals.

Patients with moderately severe bronchial asthma usually fail to obtain relief from ephedrine sulphate but they are frequently benefited by the oral inhalation of epinephrine hydrochloride (1:100) from a specially designed atomizer.

Patients with severe acute asthma should first receive 0.3 to 0.5 cc. of epinephrine hydrochloride (1:1000). Such a dose should be repeated every fifteen minutes until four doses have been administered or until relief is apparent. To prevent recurrence of asthma, an intramuscular injection of 0.75 to 1.0 cc. of epinephrine in oil should follow. One of the barbituric acid derivatives may be employed as a sedative. An injection of 0.3 to 0.5 cc. of Schlesinger's solution is permissible if the patient is badly in need of rest. Evidence is advanced in favor of the use of epinephrine therapy for hypertensive patients with severe asthma.

Patients with intractable asthma are acute medical emergencies. These patients fail to obtain relief from the usual epinephrine preparations, but they have been wrongly considered to be "epinephrine fast." The intravenous injection of 100 cc. of 50 per cent sucrose to which has been added 0.5 cc. of epinephrine hydrochloride (1:1000), or the injection of 0.48 gm. of aminophyllin diluted in 10 cc. of normal salt solution, may give temporary relief. The continuous or intermittent inhalation of an atmosphere of 100 per cent oxygen, or of 80 per cent helium and 20 per cent oxygen is a physiologically sound therapeutic measure. To improve cardiac action, digitalization should be carried out in twenty-four to forty-eight hours. A maintenance dose of digitalis should then be provided until there is freedom from asthmatic symptoms. Sixty to 120 cc. of a mixture of equal parts of ether and olive oil may be instilled rectally to induce sleep. Opiates, because they depress the respiratory center, should not be given.

Patients with severe chronic bronchial asthma require frequent daily and nocturnal injections of epinephrine hydrochloride (1:1000). The use of intramuscular injections of epinephrine in oil permits fewer injections and is followed by longer periods free from symptoms. The value of intratracheal injections of iodized oils is generally overrated.

Sulfanilamide, sulfapyridine, and sulfathiazole have been found to be effective in the treatment of a small group of well chosen patients with infectional bronchial asthma.

Following a discussion of the autonomic innervation of the lungs, the merits of such operations as unilateral sympathectomy, unilateral stellate ganglionectomy, unilateral vagotomy, and unilateral and bilateral posterior pulmonary "plexectomy," are considered.

Rhus toxicodendron radicans, or poison ivy, and rhus toxicodendron diversiloba, or poison oak, are two different plants. Poison oak inhabits the western coast, while poison ivy is found in the Middle West and on the eastern coast.

The poison ivy plant is more virulent during the spring and summer months. However, because the stem of the poison ivy retains some sap during the fall and winter months, poison ivy dermatitis may occur in the late fall or winter if contact of a sensitive individual with the stem should occur.

A satisfactory scheme for the symptomatic treatment of poison ivy dermatitis is outlined. The various commercial preparations for the specific treatment and prevention of poison ivy dermatitis are described.

ABSTRACT

MODIFICATION OF PHYSICAL STANDARDS FOR SELECTIVE SERVICE

A circular recently issued by the chief of staff of the U. S. Army on the modification of physical standards under Selective Service reveals that men will no longer be considered suitable for military service if they have malaria, hookworm, nutritional diseases, certain blood diseases, or remediable incapacity due to recent acute illness or injury or to employment or environment in civil life, *The Journal of the American Medical Association* for Nov. 16 reports.

Beriberi, scurvy and other nutritional deficiencies, if remediable by correction of diet and not severe, will no longer be considered as conditions which would permit general military service, *The Journal* says. Likewise men are disqualified if they have secondary anemia, purpura, sickle cell anemia or malaria.

These defects, the circular explains, "will be regarded as causes for rejection by Army medical examiners until there has been recovery without disqualifying sequelae. Medical examiners will reject all men who by reason of physical defects are considered unfit for early participation in training activities."

"This is in accord with the expressed statement that the purpose of the Selective Service is to secure men physically fit for military training at the time of examination and not primarily to rehabilitate those who are found to be unfit," *The Journal* observes. "No doubt, however, every encouragement will be given to those who are unfit to seek recovery from the conditions for which they are rejected so as to be available subsequently."

DIAGNOSTIC SIGNIFICANCE OF PAIN IN THE ABDOMEN*

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The acute pathological conditions in the abdomen which require surgical treatment are always accompanied with pain. In the main these acute conditions are those in which there is an infection of the peritoneal cavity or a likelihood of an infection if surgical intervention is not made.

Pain of similar character is noted in other pathological conditions in which there is no likelihood of infection of the peritoneal cavity, and consequently in which no surgical intervention should be made. Important factors other than pain in making a differential diagnosis between these two large groups of diseases, medical and surgical, are of apparent use. In both groups, however, pain is a dominant symptom and its distribution, its severity, its beginning, its cessation, and its relation to other signs and symptoms are of the utmost importance in reaching a correct diagnosis.

In by far the vast majority of the acute diseases of the abdomen requiring surgical treatment, the diagnosis is not a laboratory procedure. It is to be reached by correct evaluation of the history of the patient, prior to and subsequent to the onset of pain and the physical findings which are presented upon examination.

It may be of interest to review the theories regarding the production of pain in the abdomen, its reference, and also the theories regarding the explanation of muscular rigidity and sensitiveness to pressure. As far back as 1888 Ross made observations based upon rather large clinical experience, and postulated that there were two types of pain, which he called visceral or splanchnic pain, one which was felt in the diseased organ itself, and somatic pain, one which was felt in the abdominal wall at some distance from the site of the diseased organ. He explained this on the basis that the afferent impulses were carried to the spinal cord by the splanchnic fibers and then diffused through the gray matter of the posterior horn into the sensory and motor nerves, giving rise to tenderness on pressure and muscular rigidity at the point of their distribution.

Later, Mackenzie, at the beginning of the century, made a contribution largely along the same line. For instance, if the stomach be the source of pain, he figured that the afferent impulses would be carried through the fourth, fifth and sixth dorsal nerves of the splanchnic system to the spinal cord and in return would show a reflex tenderness and rigidity in the spinal distribution of corresponding nerves to the abdominal wall. This he termed a viscero-sensory and viscero-muscular reflex.

There are certain observations which lead one to accept such a theory with considerable hesitancy. The first one was noted in performing colostomies. Doing this operation in two stages, the bowel was brought outside the abdomen and after a sufficient period of time had elapsed to permit of sealing of the peritoneum it was noted that one could open the bowel either with the knife or the cautery without causing the patient any pain whatever. Hence it was difficult to believe that if the splanchnic pain originated in the organ itself, there shouldn't be some transmission of impulses with evidences of their reception.

Further clinical observation was noted when under the impulse of local anesthesia abdominal operations were undertaken with only infiltration of the abdominal wall. It was found that appendices, even though inflamed, may be taken out without pain, that gastroenterostomies can be done without pain, that resections of the gut can be done without pain, that cholecystostomies can be done without pain, that removal of ovarian cysts can be done without pain, with one provision, that one does not produce traction on the mesentery.

If the ideas of Mackenzie and Ross were correct, they do not explain the absence of pain under the conditions just mentioned.

Later, about 1931, Morley's work was published. He reported his observations on the production of pain, and was unable to accept Mackenzie's and Ross' idea that the impulses passed through the afferent splanchnic nerves. He thought the phenomenon dependent upon the distribution of sensory fibers of the spinal nerve system into the parietal peritoneum, and that contact with the inflamed organ produces the pain. All of us have met the experience, for instance, of a retrocecal appendix undergoing acute inflammation, in which there was little or no rigidity and in which there was little or no pain on pressure. If Mackenzie's idea be correct, pain should be present, as well as if the appendix were situated immediately under the parietal peritoneum, but with Morley's explanation it is apparent that the appendix being retrocecal, not coming in contact with the sensitive parietal peritoneum, there will be little or no rigidity and little or no pain on pressure.

All agree that there is a distinct visceral pain, but only when the viscus is a hollow one, in which there is obstruction to its outlet associated with the presence of more or less active peristalsis. We see this in the early hours of appendicitis, pain diffused over the entire abdomen, no muscular rigidity and no tenderness on pressure, due to obstruction of the canal of the appendix together with the presence of violent peristalsis. As soon as the inflammation in the appendix penetrates its wall and reaches its

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peritoneal coat so that it may come in contact with parietal peritoneum, we observe what we speak of as localization, in other words sensitiveness on pressure, muscular rigidity, and according to Morley's idea due entirely to irritation of the sensory spinal nerves in the parietal peritoneum.

Mackenzie's idea was that pain is largely reflex. The most beautiful example of reflex pain is to be found in instances of rupture of the hollow viscera within the abdomen in which the pain is located over the acromion process and over the clavicle. The explanation is that the diaphragm embryologically is developed in the neck and as the lungs are developed from the pulmonary buds of the foregut it is pushed downward, carrying with it the phrenic nerve, which comes from the fourth cervical segment. The phrenic nerve in addition embraces fibers from the third and fifth cervical nerves and these two nerves supply the skin over the acromion, the supraspinous fossa, and the clavicle. The phrenic nerve supplies the diaphragm and particularly its under surface with sensation, so that in the event of rupture of a duodenal or a gastric ulcer, if the escaping fluid gets above the liver or above the spleen and irritates the under surface of the diaphragm, we note pain in the distribution of the third and fifth nerves, which are sensory in type, consequently the patient complains of pain on the tip of the shoulder. Blood from a ruptured ectopic gestation or an intra-abdominal injury may produce the same character of reflex pain. Shoulder pain does not occur in all such instances, but when noted it is an extremely valuable symptom, indicating perforation or injury of some of the intra-abdominal organs with irritation of the under surface of the diaphragm.

One may say not absolutely but practically that pain from the organs developed from the foregut are felt in the epigastrium, those developing from the portion of the intestine derived from midgut are usually about the center of the abdomen; while those arising from the left colon and rectum, that part developed from the hindgut, are usually felt in the lower abdomen.

When we realize the multiplicity of symptoms and often the similarity in the pain that is felt in the upper abdomen from diseases of the stomach, diseases of the duodenum, diseases of the gallbladder, biliary tract and pancreas and even from the heart, one does not at first glance see how this peculiar distribution of pain occurs. Let us go back to the embryological development of these organs for the explanation. The esophagus, the stomach, the duodenum, the liver, the bile tract, the pancreas, are all developed from the foregut, so that all of the attritional and chemical processes of digestion occur in this particular segment. The jejunum, ileum and first half of the colon are developed from the midgut and are concerned chiefly with absorption; the left half of the colon and the rectum are developed from the hindgut and are devoted to elimination.

The nerve supply of the first segment receives innervation from all three systems. The eleventh cranial or pneumogastric nerves supply the esophagus, the stomach, the heart, the lungs; they send through the plexuses with which they communicate, fibers to the liver, to the pancreas, to the spleen, to the suprarenals and to the kidneys. The spinal system contributes the phrenic nerve which in addition to supplying the under surface of the diaphragm also enters into the formation of the plexuses which supply the falciform ligament of the liver, the liver, and the right suprarenal. The splanchnic supply from the celiac plexus unites with fibers from these two sets of nerves to form the coronary, the hepatic, and the splenic plexuses, and they in turn inosculate with the other fibers to send distributory fibers to all of the organs mentioned. When one considers this intricate and extensive communication of nerve fibers and filaments, it becomes clear that with disease of these various organs pain may be substernal, precordial, in the epigastrium, in either hypochondrium, in the back at the angles of the scapula, in the region of the suprarenals and in the instance of perforation may even be referred to the tip of the shoulder.

This gives us a fairly good idea of the difficulties which one experiences in endeavoring to interpret from a clinical viewpoint the aspects of pain and symptoms of this upper tract. It also explains the perplexity one at times encounters in making a differentiation between lesions situated above the diaphragm from those situated below it. The importance of distinguishing between coronary thrombosis and acute abdominal lesions is obvious. Common to certain abdominal conditions and coronary occlusion are the following: rapidly developing, severe pain referred chiefly to the upper abdomen; muscular rigidity; epigastric tenderness; vomiting, shock and collapse; fever and leukocytosis. Of prime importance in recognizing a coronary affection is a history of arterial hypertension, previous attacks of angina pectoris, a sense of constriction in the chest although the pain may be almost entirely abdominal, aching in the arms, progressive fall in blood pressure, a rise in the pulse rate, feeble heart sounds, gallop rhythm and the distinctive electrocardiographic findings.

Diaphragmatic pleurisy and incipient or central pneumonia may cause abdominal pain and rigidity accompanied with vomiting, fever and leukocytosis. In children in whom the thoracic signs are late in appearing and in some cases of diaphragmatic pleurisy in which few signs may be found, diagnosis may be difficult, particularly if the right chest be the one involved, when the abdominal signs may strongly suggest appendicitis. The chest lesions frequently develop in the course of a common cold, are often initiated with a chill, the pulse-respiration ratio is lessened, the alae nasi dilate with inspiration, the psoas and obturator tests are always negative and pain and tenderness upon rectal examination are absent. Pressure upon the left side of the

abdomen increases the pain, if it be abdominal in origin, fails to do so if it be thoracic in origin. Morphine in sufficient dosage to relieve the pain will aid in making a differentiation: if the lesion be in the thorax, the rigidity and the pain upon pressure will be absent, while if it be in the abdomen, pain will still be elicited on pressure. Finally, an x-ray film of the chest will be of help in cases which remain doubtful.

Gastric and duodenal ulcers pursue periods of activity and periods of quiescence with and without treatment, and almost invariably at some time in their course produce pain. Seasonal variations are usually explained on dietary basis, but in our experience this explanation does not always hold true. The pain in peptic ulcer, as long as it remains rather superficial, is ordinarily not severe, but is one that may be disturbing. As the ulcer penetrates deeper and deeper the pain becomes greater and greater until with perforation and the escape of gastric or duodenal contents it becomes unbearable. The time of appearance of the pain may be of importance and it has been held that this one point may serve to differentiate between gastric and duodenal ulcer. In our experience but little reliance can be placed upon the time of appearance in making a differentiation between gastric and duodenal ulcer, if the gastric ulcer be situated near the pylorus. If the ulcer be situated in the proximal half of the stomach, there are definite clinical differences between it and those situated near the pylorus in the duodenum. Otherwise one notes pain when the stomach is empty, relieved by the administration of food or alkalies, followed by a return of the pain after two or three hours. Much interesting experimental work has been done to explain the presence of pain when the stomach is empty and it has brought out the fact that the hunger pain which for long was thought strongly indicative of ulcer and due to the action of gastric acid on the open surface of the ulcer, may be and is oftentimes present in perfectly normal stomachs. A normal individual who has been without food beyond the accustomed time may complain of a gnawing pain, similar to that observed in ulcer, but due entirely to exaggerated peristaltic waves in the stomach wall. It has been shown that of the symptoms directly referable to the stomach, regardless of whether the cause be intra or extra-gastric, 80 per cent are due to disturbance of motility in the stomach wall. The muscular wall of the stomach receives its innervation from the pneumogastrics and has in addition independent centers of origination of muscular movement; these two forces give rise to peristaltic waves, which starting at the point of their origination, traverse a direction toward the pylorus. Hunger pains are due to an exaggeration of these peristaltic waves and occur in normal stomachs as well as in those showing ulcer. When obstruction at the pylorus is present, whether due to spasm or to organic lesion, the wave is reversed and nausea ensues; if the obstruction is sufficiently marked and the peristaltic waves sufficiently strong, vomiting follows. Many causes, both functional and organic, contribute to the production of these symptoms by interfering with gastric peristalsis. Hunger pain, for instance, is not infrequently noted in chronic pathological lesions of the gallbladder and appendix and offers a nice point in differentiating these from peptic ulcer.

As to whether or not hydrochloric acid contributes much directly to the pain of peptic ulcer is a moot point. There is an associated hyperacidity in the vast majority of peptic ulcers and it has been assumed that this hyperacidity is the responsible element in the production of pain. The observation that ulcers may be present without an accompanying hyperacidity, or even in the presence of hypoacidity, leaves this assumption open to doubt. In all probability the explanation for the relief of hunger pain by nausea and vomiting or by the ingestion of food or alkalies lies not so much in the neutralization of acid brought about by these measures as by the fact that the intense spasm of the pylorus and prepyloric portion of the stomach is relieved.

Persons with an ulcer in the duodenum or in the prepyloric portion of the stomach will have more pain than individuals presenting hunger pain in the absence of ulcer and any means, whether it be food, alkalinization, antispasmodics or vomiting which relaxes the spasm will afford relief.

ABSTRACT

EXPOSURE TO LOW OXYGEN ENVIRONMENTS

The possibility that repeated exposures to environments low in oxygen, such as encountered by aviators flying at high altitudes, may damage the nerve cells of the brain and gradually lower the brain's reserve power, leading eventually to mental conditions comparable to those of the "punch-drunk" boxer, is suggested by investigations reported in *The Journal of the American Medical Association* for November 9 by Melvin W. Thorner, M.D., Randolph Field, Texas, and F. H. Lewy, M.D., Philadelphia.

Their studies show that exposures to total lack of oxygen for periods too short to cause death lead to degenerative changes in the brains of guinea pigs and cats. "Because of quantitative differences in the extent of anoxia (oxygen deficiency) and the differences in species," they say, 'these investigations cannot be translated directly to situations of oxygen deficit in man. Yet they indicate that exposure to anoxia of increasing duration or repetition is followed by graded severity of damage to the nerve cells in brain and brain stem."

COMMON PHYSICAL DISORDERS OF CHILDREN*

THEIR NOSOLOGICAL ORIENTATION AND WAYS OF VIEWING THEM

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INTRODUCTION

Symptoms occur much more frequently than do physical diseases, both in children and in adults. Symptoms comprise an extensive part of pediatric occupation; singly or in combination, associated with but not a part of physical disease, they constitute the common disorders of childhood.

When a troubled adult (the so-called "nervous patient") comes to us for advice, it is because his symptoms have become a handicap, either in his work or in his social intercourse, or else they are a cause for anguish to him. Then, regardless of what he says, his behavior often creates the impression that he has no inclination whatever to be relieved of his complaints. What he actually wants, if he desires to be cured at all, is not the removal of his symptoms but the elimination of that which has given rise to them. For these symptoms represent the only solution which the patient has been able to find for his problems, and he is prepared to defend it with a stubborn persistence. Nor can he be expected to abandon his own solution, however arrived at, for a less comfortable one, or for none at all.

So it is with the child, with perhaps this difference. A child hardly ever seeks medical assistance on his own initiative; he is brought to the doctor. His feelings and preferences are not consulted in a matter over which he has no final choice. If, for instance, his own problems have led to a solution resulting in prolonged disinterest in food and in eating, the cause for alarm is sufficient to catapult his mother into a doctor's consulting room, the child at her heels. There the disorder will have to be adjudged as a piece of conduct incompatible with every known standard and rule of medical science regarded as desirable for the maintenance of good health.

Why is the incidence of these symptoms so high, how may we account for them, and what determines their resistance to our therapeutic influence? In order to discuss these questions, it will be my purpose to formulate for your consideration, first, an orientation of symptoms within the broad classification of diseases and disease causation and, second, the proposal of an attitude by means of which the common disorders of children may be viewed and understood most easily.

CAUSES OF DISEASES AND SYMPTOMS

Physical diseases have causes. So do symptoms and common disorders. To a physical disease one endeavors to affix a single etiology, whereas symptoms may have several causes. The physical bases of disease in children have been described with exactitude insofar as knowledge of them is available. The origin of symptoms is less clearly described, if at all. Teachers and textbooks generally omit a discussion of symptoms except for those that actually have, or can be supposed to have, a kinship to physical disease. Teachers are specialists in diseases and, if consultants as well, they seldom have occasion to meet with symptoms and common disorders. Practitioners are obliged to treat them every day. Teachers are not expected to devote their attention to a study of common disorders while the major tragedies of disease in children continue to take their toll. Yet the mounting incidence of common disorders and the lowered mortality rates from diseases is having the effect of bringing these two extremes of teaching emphasis into a better relationship to each other.

Pediatrics has done its work with becoming modesty and great efficiency. The care of neonates and prematures with improved methods of infant feeding has alone established for pediatrics an enviable position among the medical specialties. Other no less brilliant successes of pediatrics are reductions in mortality and morbidity rates from nutritional disorders, bacillary dysentery and noninfectious diarrhea in babies; the advent of vitamin therapy in preventing rickets, tetany, scurvy; postponement of measles, by use of convalescent measles serum, to a time when its effects are less disastrous; and the vanishing death rate from diphtheria because of widespread immunization.

Medical science can be justly proud of this record. Nothing can detract from it. However, it is my belief that we could be even more proud of these achievements if it were not for one complicating problem, namely, the interactions of physical and emotional factors involved in all human actions and reactions. Factors such as these inevitably interfere with the study of diseases and impose certain limitations upon the methods employed by science. However, it is gratifying to note that in this field, the field of psychosomatic medicine, pediatrics is beginning to sharpen its interest. It is acknowledging responsibility for study, prevention and treatment of conduct disorders and their symptomatic accompaniments in children. Pediatric teaching services in many American medical college hospitals are being augmented by the addition of psychiatrists and pediatricians with psychiatric experience. I have no doubt that future psychosomatic studies in infants and children will reflect further credit to the record of pediatrics. It seems to me, too,

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that such studies offer greater rewards where children are concerned than anywhere else in medicine, owing to the fact that here one deals with a plastic age population not too far removed from the earliest and most important experiences in life.

It is possible in the case of a sick child to arrive at some conclusion as to why health has not been maintained, for the causes of disease are few. Inherited disease, such as amaurotic family idiocy, is predetermined in the ovum and spermatazoon. Congenital disease presupposes an infection or toxic action in utero, or injury during birth. Simple developmental defects are easier to explain than is the fact of symmetry and completeness of the human body. Malignant diseases, though they have, by and large, unknown causes, are rarer in children than in adults.

Diseases occurring apart from these already mentioned are due to post-natal factors. Winnicott[1] succinctly enumerates the post-natal factors as follows: "First among such factors may be cited a hostile universe, comprehending man and all living things, including bacteria and viruses; next, as regards environment, there are dietetic indiscretions or deficiencies, absence of opportunity for exercise in fresh air; and poverty of light in ultra-violet rays, and lastly 'act of God' or accidental trauma, which accounts for its own group of tissue changes, fractures, lacerations, concussions, burns, electric shock, chemical poisoning, drowning, etc." He then goes on to say that "this list exhausts the physical causes of disease. . . . What remains is the less often described psychological basis" of disorder or lack of health. Anxiety, as we shall see, is the *sine qua non* of psychological disorders. Directly or indirectly, the majority of complaints which propel mothers to a pediatric clinic or send them hurrying to physicians for advice, are the result of anxiety either on the part of the child or the mother, most frequently both.

Emotional development is seldom complete and is generally spotty. Adult human beings when regarded as "normal" still show wide variations in the degree of maturity attained for the mastery of destructive impulses—fear or rage—carried over from infancy or early childhood. Emotional growth is normally difficult in children even under the most favorable conditions of external environment. When harshness, severity and deprivation are the companions of childhood, it can be assumed that full emotional maturity will seldom be evolved, and in the presence of these companions there flourishes a rich and varied accompaniment of common disorders. Symptoms arise from conflicting impulses under the urgency of social pressure to conform and the equal urgency of the child's need to derive satisfactions pleasurable to himself.

Anxiety—closely related to fear, apprehension, and uncertainty—is primarily a mental state. It is derived from conflict, the force of which threatens to disrupt a comfortable balance between instinctual urges or "drives" on the one hand, and the degree to which gratification of them is permissible on the other. Or, stated somewhat differently, opposed impulses (i. e., what the child wants to do against what he knows is expected of him or forbidden to him) represent conflict. When the conflict becomes intense, the strength of opposing forces being about equal, and a solution for the problem is not consciously available, there results an intolerable mental state in the child that may be called anxiety. And, in order to lessen the tensional dissatisfactions generated by this situation, a part of the child's personality—regarded as the more rational, self-protective part—strives with all its might to bind the anxiety so as to restore a modicum of equilibrium within its whole personality once again. In so doing the child develops defensive reactions against the instinctual urges comparable to the production of fever and immune substance when the physical body is threatened with an invasion of toxins from diphtheria bacillae.

In the case of anxiety, the defensive measures undertaken may be of two varieties: in one type there are erected phobias or obsessional acts; in another type the whole conflict is dramatized by the body, anxiety being converted into physical symptoms. These conversion mechanisms operate in almost any part of the body, producing the symptoms of conflict not consciously resolved. Gluttony, anorexia, thinness, obesity, hyperaesthesias, tubular vision, enuresis, glycosuria, constipation, lump in the throat, throat clearing, vomiting, dyspnea, tachycardia, headache, fainting, tics, stuttering, fidgetiness, bodily aches and pains, liability to colds and infections, nasal and paranasal congestion, aphonia, etc., are a few of the many common disorders and symptoms.

Anxiety is accompanied by vasomotor disturbances, a tendency to contraction of unstriped muscle, and sweating. Chronic forms of anxiety often lead to organic changes which are seen particularly among adults in a certain forms of hypertension and in peptic ulcer associated with a dependent, tense personality. From these indications that smooth muscle, secretory, vasomotor and metabolic mechanisms accompany severe unresolved mental conflict, it would be easy to piece together the clinical picture of anxiety even if it were not a daily experience of any doctor dealing with sick children or adults.

Having proposed that conflicting impulses within the same person operate to produce anxiety which, in turn, is bound in some way to create the manifestations that we have called symptoms and common disorders, let us now approach our thesis from a slightly different direction.

Starting with the concept of anxiety, we can be more definite and specific if, henceforth, we agree to regard anxiety as that emotion, feeling tone, or state of being, with its physiological concomitants,

[1] Winnicott, D. W.: *Clinical Notes on Disorders of Childhood*, William Heinemann, Ltd., London, 1931. p. 3.

which inevitably accompanies, and is an integral part of, any conflict or dilemma. In short, anxiety is the characteristic emotion of conflict; it represents the tension accompanying effort of two opposing tendencies to find simultaneous expression. The dilemma may be mild or intense, and the person may be unaware of one or of both tendencies at conflict within himself; for example, the submissive, compliant school child is often unaware of his deep resentment and hostility to the teacher who parades his exemplary behavior before the class, causing him to be taunted afterwards by his playmates.

The most serious conflicts in our present-day culture occur in connection with the display of feeling. It is the soldier who is beset by both the impulse to show fear and the equally strong desire to maintain his ideal of bravery, who later develops anxiety neurosis. Anxiety is produced when the inclination of an older child to display jealousy and hatred of a younger sibling is in conflict with the requirement that he accept, love and share his mother with the newborn rival.

The very young child, judging from complaints one hears from his elders at every session of the hospital clinic, is more or less greedy, dirty, odoriferous, destructive, cruel, shameless, inconsiderate, egotistic and has a number of "bad habits" in the use of his body. Society, on the other hand, expects quite the reverse. The representatives of society—his parents—demand of him that he have moderation, disgust of dirt, modesty, sympathy and consideration for others; that instead of giving vent to his rage through destruction of articles in daily use, he shall cherish his possessions and respect the property of others; that egotism shall give place to altruism; and lastly, that he cease his bodily tricks because of their prohibition.

Considering that what the parents want and what the child wants are in direct opposition, there can be no doubt of our being on the right track in tracing out the origin of conflict. In the first two years of life, conflict is largely between the child and parent. Left alone, the child follows without any scruple a direct path to the cupboard and thus to forbidden gratification, fearing only a direct reprimand or some bodily interference. But after the first two years, it is otherwise; by this time he knows what is permitted and what is forbidden and can govern his behavior accordingly.[2] The conflict, whether severe and harmful or mild and innocuous, is now becoming internalized and this internalized struggle continues even when the child is far removed from his parents.

To the child the attainment of pleasure is the main object of life. The adult wishes to teach him to regard the claims of the external world (the standards of social conduct) as more important than these instinctual urges. The child is impatient, he cannot endure any delay and acts only for the moment; the grown-up person teaches him to postpone gratification of his impulses and to take heed of the future.[3]

In this opposition of forces, i. e., expressions of the child's own natural primitive impulses and the requirements imposed upon him by virtue of his training and education, there can be accorded to the child every educational opportunity for a successful issue of the conflict, or a denial of his right to an integrated personality. We know that his development is facilitated when just enough gratification is given him and an equally judicious restraint is imposed upon him. Given too much gratification, or too much restraint by excessive threats of injury or threats of withdrawal of love and protection, and the end result remains about the same: his development is short-circuited, resulting in his clinging to an infantile form of behavior. In the first instance, anti-social conduct is an issue; in the second, there will occur inhibitions.

WAYS OF VIEWING THESE DISORDERS

Up to this point, my purposes in directing your attention to symptoms and common disorders have been, first, to emphasize their ubiquity; second, to orient them in a nosological scheme as defensive measures against anxiety; third, to attribute their immediate causes to conflicts of opposing tendencies; and lastly, to place their ultimate origin in the child-family interpersonal relationships.

Now, in order to bring these problems closer to living realities, that is to our patients, upon whom the reason for our therapeutic existence depends, I would like to submit two excerpts of case histories from the clinic. They will serve to illustrate two points of view, each of which represents an attitude or way of looking at the person whose behavior is a cause for medical scrutiny. One point of view involves a shift of attention from parts to the whole, from organs to person; the other has to do with the employment of a "longitudinal" method of gathering history which presupposes a genetic approach.

Medicine, from its beginnings as a natural science, has been dominated by the belief that life phenomena could be reduced to physio-chemical processes.[4] This extreme somatic analysis was found to be as one-sided as nineteenth century psychology which sought to explain the cause of mental life and bodily behavior in exactly the opposite way, i. e., in terms of ideas. But in the light of newer contributions from psychobiological sources (studies of Adolf Meyer, Walter Cannon and the analytic schools), medicine is having to revise its views. One important result of this revision is a shift of emphasis from organs and their disorders to the improperly functioning person. Another result is the inclusion of emotions and emotional factors in our medical way of thinking.

[2] Freud, Anna: *Psychoanalysis for Parents and Teachers*, Emerson Books, Inc., New York, 1925. p. 56.

[3] Ibid.

[4] White, William H.: *Twentieth Century Psychology*, Norton, New York, 1936.

We know that the body is equipped to develop and express fear, rage, grief, shame, love and hate. When these emotions are intense and find conscious expresson we get an exaggerated physiological picture. It is when a conflict occurs over the expression of these emotions that we get a pathological condition. Snowdon believes that nature intended all emotion to lead to immediate physical activity and that when this does not occur the blood is poisoned: "Often two school boys fight and then shake hands and are friends. If prevented from fighting they cannot be friends. It is a true statement when people thenceforth say, 'there is bad blood between them.'"

According to the view we have expressed, anxiety becomes a disease of the entire personality and not of the nervous tissue, although the clash of opposing trends may operate over the entire voluntary musculature, showing simultaneous stimulation of flexor and extensor systems. Moreover, the platform of operation may be reflected in a diencephalic conflict, a thalamic disequilibrium, the entire system being flooded with adrenalin which it does not utilize. Or the area of conflict may be transferred to the vegetative nervous system wherein simultaneous activation of both the sympathetic and cranio-autonomic are involved.

This excerpt from the medical record of an adolescent boy may serve to illuminate the point of view I have been expressing:

> A lad of fifteen years was admitted to the hospital with an illness of ten months' duration. Because of marked emaciation, marked pigmentation of the skin (most prominent over exposed surfaces), delayed development of secondary sexual characteristics, and gastro-intestinal manifestations, he had been thought to have Simond's disease with possible adrenal insufficiency. Massive doses of antuitrin over a period of several months had failed to improve his condition.
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> His complaints were nausea, vomiting, loose stools, and loss of weight. Never robust, his maximum weight of eighty pounds was reached at thirteen years and remained stationary for another year, or until he fell ill. Since that time his weight had fallen to fifty-four pounds, about thirty pounds under the minimal average for his height and sex. X-rays of the head and chest, blood chemistry, basal metabolism tests, gastro-intestinal studies, tuberculin test and repeated stool examinations for parasites did not reveal any pathology whatever.
>
> His previous failure to respond to antuitrin therapy, in addition to a relatively good appetite, mental alertness, absence of marked fatigue, and the presence of a moderate degree of muscular strength caused him to be regarded as having a case of anorexia nervosa with severe malnutrition and secondary atrophy of many organs and glands.

So much for the organic aspects of our case history. To our way of thinking, however, medical science has not offered its fullest contribution until it has incorporated such factors as the role of emotions in disease causation and has shifted the emphasis from organs to the entire person. From this point of view our case history continues as follows:

> We know that this lad fell ill under startling circumstances. One night after having gone to bed, he was rudely awakened by shouts of, "Help, I'm bleeding to death!" which came from the house next door. At the window the boy witnessed a woman in the act of stabbing her husband. In his own words the boy tells the story thus: "On the night of the shock after I heard all the screaming and shouting I woke up so quick and was so frightened that I rolled off the bed and landed on my hands. I got up off the floor and ran to the window—and my window is opposite theirs and I witnessed it all. I took one look, felt sick, and ran to the bathroom. What happened afterwards was a lot of excitement—police, news reporters, photographers, curious people, bells ringing—it all seemed like a big jamboree. I couldn't eat after that. I had a fear that if I ate, I'd vomit. As soon as the food was in my mouth, I'd experience that terrific nausea. It was such a shock. I took one look out of the window and felt my stomach turn over, and how I felt sick! My stomach was so sore I had to have a hot water bottle on it; it felt torn, I'd vomited so hard. The reason I felt so shocked was because—before all this happened—I was friendly with their son. It was a quiet family and had no trouble as far as I know. Then it all came out in the papers. And when I found out how they really were, I felt hurt that such quiet people couldn't stay in their own place. It was a funny thing—I tried to forget about it, but it was always on my mind.
>
> "After that I stayed in the same condition and saw every kind of a doctor and had no moment's peace—always going to a doctor's office or always in a doctor's office, or taking something, or having a test taken. I don't like it when a doctor frightens you. According to one doctor I should have been dead six months ago; I heard him say to my mother: 'If that boy doesn't have a transfusion right away, he won't survive.' Well, I called his bluff and here I am. But I looked pretty gosh-awful sick at that time. After all that's been said about me, I don't care any more what they say—I'm still alive. But if you've got to go, you've got to go, and there isn't anything to stop it. After all, there are worse cases than mine. It's all a question of eating, I've got nothing internal the matter with me. It's true

I have a little indigestion but I really feel now that my health will be better."

The boy spoke of his angry temper and of the (very rare) fights which he had had with other boys. Frequently he'd get so angry that in his own words he literally "saw red." He'd start swinging his fist only to discover that the other fellow had stepped aside to taunt him and he was left—just swinging.

"But in the past three years I felt that if anyone would raise his hand to strike me I'd be cowed, tense, scared. All of these things had been piling up for years and *if it hadn't been for the shock, something else* might just as well have *made me get sick.* Whenever I'd see anything exciting, my mouth would open up, and after the shock it all came pouring out in a rush."

Time will not permit any further review of this boy's history and the multiple causes of his illness. But it might be noted here that, although every one of the eight or ten physicians who saw the boy had a knowledge of the circumstances under which his illness had its onset, none of them seemed to have shifted his focus of attention from organs and organic disorder to the improperly functioning person.

The second attitude or way of looking at the person, of which I spoke a moment ago, addresses itself to a genetic point of view. In our approach to common disorders we might use a method known to experimental psychology, that is: we might single out some event that is fairly common to all children and by the proper techniques learn to follow its subsequent course throughout the personality with the aim of unifying a group of life phenomena which would otherwise be unexplained and inexplicable. If, for example, we scrutinize the effects on an older sibling of the birth of a younger child, and if we succeed in classifying all the varied types of behavior arising from this one event, we have exemplified a genetic approach and can lay claim to a victory for research.

Clinically, however, the above approach is impractical, for here we are confronted, not with the problem of sibling rivalry, but with a symptom from which it is necessary to arrive at the problem. It is here that the "longitudinal" method of history-taking, of which I have spoken, may be employed to advantage. Starting with the complaint, or with a group of current events, we then develop all the factual conditions giving rise to it, including circumstances of the onset as well as predisposing factors. Next, these facts are arranged in a longitudinal or chronological fashion so that the *essential problems,* out of which the complaints have grown, become more evident as the whole life history is brought into perspective and its dynamic relationships exposed. At this point, a therapeutic plan is erected in accordance with the problem and the degree to which it can be modified.

Although the number of complaints and variations of behavior which present themselves to us are extensive enough to fill an index of vast proportions, the problems which lie behind them are relatively few. By employing the genetic point of view and taking a longitudinal history, it is possible to reduce the symptoms to their common denominators, the problems. This process may be observed in the following case history:

A preadolescent girl, eleven years of age, is brought to the hospital dispensary with a single complaint, "insomnia." For a period of eight months she has had repeated bouts of sleeplessness. In these bouts, she is either unable to fall asleep or she awakens shortly afterwards.

Physical examination and routine laboratory tests cannot account for her insomnia. One of the barbiturates gave her some relief, but she continues to ask for a sedative each night and her mother is alarmed lest she make a habit of taking the drug. In the absence of any demonstrable physical disease we are obliged to account for the insomnia by other means. To say that this is an attention-getting device is not enough, although it cannot be denied.

Inquiring further into the problem we learn that she has a brother eight years old and a brother eight months old. Her complaint dates back to the time when the second brother was born. While her mother was in a lying-in hospital, those caring for the children observed that our patient was unable to sleep. Subsequently, during her bouts of insomnia she complained that God was punishing her, that she couldn't sleep as all the other children did. Moreover, she noisily walked from one room to another, disturbing her parents' rest and requiring mother to comfort her and read to her that she might fall asleep again. After several months of these bouts her behavior became more than a little tiresome to mother and father, resulting in her being brought to the hospital.

We inquire into the child's conduct at home and at school and confirm our general impression of a well-behaved, polite little girl, almost "too good" a child. She is easily led in play, conforms to the expected classroom deportment; her school marks are excellent, she strives for perfection and worries lest she fail to maintain her inexorably high standards of achievement. One concludes that over-conscientiousness is a fault rather than a virtue of her character.

Developing another line of inquiry, it is discovered that after the birth of her first brother —when she was three years old—her reaction was one of intense jealousy. For many weeks she threw herself on the floor, kicking her heels and screaming in jealous rage. Left alone, the

tantrum would subside, and in words and gestures appropriate to her age the child would indicate her contrition by wishing to make up to her mother.

The meaning of her insomnia is now apparent. While still a child of three she could display her jealousy by tantrums. At eleven her own self-regard, self-criticism, or "conscience" no longer permits her this form of outlet for her feelings. Instead, the birth of a second brother, coupled with typical adolescent phantasies she was having at the time, operated as a signal for reactivating an old but uncleared former jealousy, which now emerged in the form of a symptom—her sleeplessness. You will observe at once the close parallel between the old tantrums and the new insomnia. Both produced the same effect. Originally there was the wish to retaliate for her loss of prestige as sole object of her mother's care, and also the wish to attract attention to herself, thus restoring a previous relationship. Moreover, the insomnia, like the tantrum, had the effect of annoying the mother, disturbing her sleep and making her cross, as well as bidding for her sole attention and proof of affection.

I trust that the illustration just given needs no further amplification. It is an example of the longitudinal method of history-taking and it fulfills a requirement of the genetic approach, i. e.: an approach which maintains that the "here and now" can be elucidated only by a recognition of the antecedent dynamic factors influencing and entering into the formation of the present.

SUMMARY

In the introduction to this paper we have asked ourselves why the incidence of common physical disorders is so high. Allowing for a shift of interest focus from organs to person, from symptoms to emotionally laden problems, a restatement of the question is then permissible. It now becomes: Why, among all disorders to which the pediatric population is subjected, should emotional disturbances have so high an incidence?

As a matter of fact, I do not have any statistical evidence to offer you that the inferred assumption of this question is either true or false. Whether the incidence of emotional disturbances is high or low, I cannot say, but their increasing prevalency seems to be the case. And in the absence of reliable data in proof of this contention, I am obliged to rely upon the observational authority of an experienced pediatrician, together with my own experience. It is the impression of Dr. Grover F. Powers that emotional or behavior problems in children have always been numerous, and that they are more frequent today than they were twenty-five years ago. "This may very well be the case," he states, "for while we diagnose those maladies more accurately and ferret them out from among camouflaging physical symptoms, it is certainly true that in modern life there is ample basis for increased emotional confusions. . . . Moreover, certain developments in pediatrics itself have had malignant influences upon the emotional life of children."[5]

Among these "malignant" influences he cites: first, lack of incentive to maternal nursing, attributable in part to progress made in the practice of infant feeding, and resulting in an interference with the development of a normal emotional relationship between mother and child; and second, insistence upon fixed procedures, conformity and regularity in the care of infants (without allowing for occurrence of wide individual variation) which also brings upon many children emotional disorders having their manifestations in "symptoms."

In both of the case illustrations which I have given, there are implied references to other of our original questions, i. e., the query as to how we may account for symptoms in the genetic-dynamic sense of their formation, and the query as to why our therapeutic attempts to influence the course of symptoms meet with strong and seemingly insurmountable resistance. Only a moment's reflection will be required in order to realize the full significance of these perplexities, as well as to bring our paper to a close.

If we hold to the claims made by various groups that symptoms are "bad habits" or merely attention getting devices (which is partly true), and that they may disappear in response to a friendly demeanor, or to a diversity of interests and recreations, or in the instance cited, to a dose of sedative, then we are obliged to introduce some new term by way of explanation. The term may be suggestion, or it may be dependency, or it may be security, or it may be discipline, or it may be something else, and the result is a lack of any uniform understanding of the process which is taking place. But if we hold to the hard won knowledge that symptoms are defenses against anxiety which in turn is generated by conflicting, emotion-ridden impulses striving for simultaneous expression, and that these impulses represent, on the one hand, forces of the child's primitive nature, and on the other hand, the internalized ideals and prohibitions derived from his parents (or their substitute); then we have gained an understanding of the meaning of symptoms. And, by employing a method that tends to expose the problems rather than their outward expressions, we are at last prepared to erect a plan of action which will make our therapeutic tasks—the overcoming of those forces which have produced and maintained the symptoms—a rational procedure.

149 EAST SEVENTY-THIRD STREET.

[5] Powers, Grover F.: Developments in Pediatrics in the Past Quarter Century, *Yale J. Biol. & Med.*, 1939, 12, 1.

THE INFLUENCE OF TONSILLECTOMY ON THE PROGRESS OF RHEUMATIC HEART DISEASE*

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Despite an immense amount of study, our knowledge of rheumatic fever, and of its most important manifestation, involvement of the heart, is still fragmentary and unsatisfactory. Despite the fact that the etiologic agent is unknown, it is almost certainly a specific infectious disease. In addition, it is probable that certain host factors, such as heredity, constitution, housing conditions, and the occurrence of respiratory infections, may play an important part in the development of the disease, or in the severity of it in a person exposed to the etiologic agent, whatever it may be.

Once the disease begins there are apt to be periods of exacerbation and remission extending over many years. The recurrences of activity are most common in the spring, but may occur at any time. In two-thirds of the cases the recurrence is preceded by tonsillitis or other respiratory tract infection by one to three weeks. In the remaining one-third no precipitating factor has been recognized.

These periods of activity of the infection are recognized chiefly by the occurrence of fever, tachycardia, weakness, elevation of the sedimentation rate, and, of particular importance, signs of cardiac weakness and decompensation. It is during these periods of activity that the involvement of the heart occurs, and in children there is not often evidence of congestive failure except during periods of activity of the infection, and death practically never occurs except during such active recurrence. In children the handicap of distorted valves is relatively unimportant as compared to the heart muscle weakness brought on by the infection. It is obvious, therefore, that if anything could be done to reduce the frequency and duration of the acute exacerbations, the extent and severity of the heart involvement might be materially reduced.

As already mentioned, the fact that about two-thirds of the recurrences are immediately preceded by throat infections has suggested that there may be some causal relation, particularly those infections due to streptococci. No attempt can be made here to review the evidence pertaining to the relation of streptococcal infections to rheumatic fever except to state that it is the present opinion that such infections do play a role in determining active recurrence of the disease in the majority but not in all patients. Such streptococcal infections should not be regarded as the sole cause.[1]

It has been in the hope of preventing these throat infections, and thereby secondarily the progressive damage to the heart, that tonsillectomy in rheumatic patients has been suggested and rather extensively carried out. In the beginning there was considerable enthusiasm for this procedure, even to the point of advocating it in every case of rheumatic fever, whether or not that individual had had evidence of tonsillitis. This enthusiasm still persists in many quarters. In one well-known hospital for children with cardiac disease, for instance, it is required that a tonsillectomy and adenoidectomy be done before a child will be admitted, partly, of course, in the hope of preventing spread of streptococci from those tonsils to other patients.

This enthusiasm has not seemed to be justified by the numerous statistical studies which have been published. In his most recent article, Kaiser,[2] after again calling attention to the fact that there are certain inherent inaccuracies in such studies due to unconscious selection and uncontrolled factors, summarizes his own and others' experience. He states, "No unanimity exists in these studies, owing in part to a different approach, but in general it has been shown that any rheumatic manifestation may develop in a child whose tonsils have been removed prior to the first evidence of rheumatic disease. There is also complete agreement in the statement that recurrent attacks of rheumatic disease are as likely to occur in children whose tonsils have been removed as in those in whom they are still intact. There is, however, some difference of opinion as to the influence of the tonsils on the cardiac complication and on the mortality in this disease."

In the case of children, tonsillectomized before any rheumatic manifestation, there was a subsequent incidence of rheumatic heart disease in 1.1% as opposed to 1.3% in the controls, which is not significant. In 597 children with rheumatic disease he found that those whose tonsils were subsequently removed had somewhat less heart involvement than in those not tonsillectomized, and, furthermore, there were relatively fewer deaths in those whose tonsils were removed. This apparent reduction in heart involvement occurred despite the fact that there were about as many recurrences as in the non-tonsillectomized group. Allen and Bayler[3] came to similar conclusions after a study of 108 patients followed from ten to twenty-five years. There was less heart involvement in their group

* Presented before the Section on Ophthalmology and Otolaryngology of the Indiana State Medical Association at French Lick, October 30, 1940.

† From the Department of Pediatrics, Indiana University School of Medicine, and the James Whitcomb Riley Hospital for Children.

[1] T. Duckett Jones: The Etiology of Rheumatic Fever. *Journal of Ped.*, Vol. 15, pp. 772-785, Dec. 1939.

[2] A. D. Kaiser: Tonsils in Development of the Child. *J. A. M. A.*, Vol. 115, pp. 1151-1156, Oct. 5, 1940.

[3] W. B. Allen and J. W. Bayler: The Influence of Tonsillectomy upon the Course of Rheumatic Fever and Rheumatic Heart Disease. *Bull. J. H. H.*, Vol. 63, pp. 111-123, Aug. 1938.

than in another reported from the same community, and since there was a low incidence of heart involvement in those operated upon before evident heart involvement occurred, they concluded that tonsillectomy and adenoidectomy was of value in the treatment of rheumatic fever.

There is a rather widespread belief among clinicians, agreeing with these studies, that although one cannot expect any definite reduction in number of recrudescences, the heart may be less severely damaged and fewer fatalities may occur. In studies involving the comparison of tonsillectomized and non-tonsillectomized groups there are some corrections which probably cannot be stated exactly but which would, nevertheless, tend to reduce any significant difference between the two groups. These factors are: In young patients, i. e., two to six years of age, rheumatic heart disease is apt to be unusually severe, and since most physicians are justifiably reluctant to do tonsillectomy and adenoidectomy on such young children, fewer of them are operated upon than would be if they were older. Furthermore, at least in our experience, cases which progress with continuous or practically continuous activity from the first attack are more common than is usually believed, and such patients, sick from the beginning, are never in good enough condition to justify the risk of operation even though the attending physician may believe it desirable.

Unless allowance is made for those rather common early deaths, comparisons of operated and unoperated cases are not fair comparisons and would tend to favor unduly the tonsillectomized group. Such patients no doubt constitute an appreciable percentage of those in the non-tonsillectomized group.

Ash,[4] in a careful study reported in 1938 upon 522 rheumatic children treated in the Children's Hospital in Philadelphia. Statistical correction was made for the various factors which might introduce errors into the figures. She came to the conclusion that there was no significant difference between those whose tonsils were or were not removed. She pointed out in addition that in a few cases when tonsillectomy and adenoidectomy is done soon after the first rheumatic manifestation, the operation itself may be a precipitating factor in bringing about a severe and even fatal recrudescence of the disease.

The present study is based on 200 patients who presented definite evidence of rheumatic heart disease. These histories were studied in two groups, one group of 100 consecutive cases beginning in 1931, and another 100 prior to 1940. Because of readmissions there is some overlap of the two groups, and although it does not represent all the cases of rheumatic heart disease seen during that time, it is a representative sample. Since many of these patients, for one reason or another, have not returned for follow-up over a long period of time, it is not possible to make valid or significant statistical comparisons of those having tonsillectomy and adenoidectomy and those who did not.

These histories were studied in an effort to determine, first, whether the operation was done before or after the onset of any rheumatic manifestations; second, whether the rheumatic infection was active at the time of the operation and whether this activity had any effect on the outcome; third, whether, if one disregarded the rheumatic condition, there was a valid indication for the removal of the tonsils and adenoids; and fourth, a study was made of the subsequent course in an effort to determine the effect of the operation upon the occurrence of further respiratory tract infections and upon recurrences of activity of the rheumatic involvement.

In a disease such as rheumatic fever the recrudescences may or may not be related to upper respiratory tract infection. It is very easy to be misled by observations of this type. In these as well as other observations of this sort, there are seldom striking changes for the better or the worse following the tonsillectomy and adenoidectomy; so there is considerable chance that personal bias may influence judgment as to any subsequent change in condition. Since the recurrence of rheumatic activity following spontaneous throat infections occurs within three or four weeks after the infection, it would seem that any recurrence to be ascribed to the operation should likewise occur within the same period, but that improvement as a result of the tonsillectomy and adenoidectomy might possibly be evident only with several years' observation. Because the factors controlling recurrence are so poorly understood, one can seldom be sure in any given case as to the influence of the operation.

Since the number of patients studied is not sufficiently large, no attempt is made to record observations in terms of percentage, as this might give an impression of conclusiveness which is not intended.

From this group of 200 cases, thirty-one had a tonsillectomy and adenoidectomy before the development of any manifestation of rheumatic fever, and this is in accord with other observations that rheumatic heart disease rather commonly develops in those already tonsillectomized. In these days when the tonsillectomy and adenoidectomy operation is so commonly done, it might seem that this is rather a small number. However, when we consider that rheumatic fever is proportionately more common in the children of the poor and that such children are less frequently operated upon than in well-to-do families, it probably corresponds quite closely to the percentage of tonsillectomized non-rheumatic children in the same economic group. In the case of two of this group the first manifestation of rheumatic fever developed immediately, i. e., within less than a month after the operation. Whether or not this is coincidence it is impossible to say, but it is suggestive.

In the remaining 169 patients admitted after the development of definite rheumatic heart disease, a

[4] Rachel Ash: Influence of Tonsillectomy on Rheumatic Infection. *Am. J. Dis. Child.*, Vol. 55, p. 63-78, Jan. 1938.

tonsillectomy and adenoidectomy was eventually done on seventy-nine. It was striking in going over the histories that a tonsillectomy and adenoidectomy was done much more commonly in the patients seen six to eight years ago than during the past few years. Without having developed any very firm convictions on the subject, we have apparently seen fewer patients where it seems indicated. We have adopted the universally accepted rule of doing a tonsillectomy and adenoidectomy only during periods when there is no evidence of activity of the rheumatic fever. The usual criteria of activity used are an absence of fever, absence of tachycardia, a satisfactory nutritional condition, and a normal sedimentation rate. Of these the sedimentation rate is by far the most sensitive and is usually the last thing to become normal as an exacerbation gradually quiets down. In this connection we observed that immediately following tonsillectomy on rheumatic patients who before operation had had a normal sedimentation rate, the rate was markedly accelerated and remained high for several days or even a week or two. This at first caused us to fear a recrudescence which in most cases did not occur, and on further investigation it was found that nonrheumatic children did exactly the same thing, so this temporary acceleration is probably of no particular significance.

Despite the fact that our intention in general has been to wait for operation until a time when there are no signs of activity, there were eleven cases, mostly several years ago before we had the sedimentation rate as a more accurate guide, when the tonsillectomy and adenoidectomy was carried out at a time when there was evidence of activity. In two of these eleven cases, the operation was followed almost immediately by a flare-up of the rheumatic heart disease. This, of course, serves to emphasize the wisdom of a policy of operating only during the quiescent stage. On the other hand, we had one boy seen constantly during his first attack who had almost continuous progress of the rheumatic heart condition associated with severe attacks of tonsillitis every few weeks. In his case the throat infection seemed to be playing such an important role in his difficulty that we did have a tonsillectomy and adenoidectomy done in the face of abundant evidence of active carditis. There was definite immediate improvement and in the eighteen months since there have been no major recrudescences.

As mentioned previously, this group of patients was studied with the idea of determining whether or not there was a valid indication for the tonsillectomy and adenoidectomy if the presence of rheumatic disease was disregarded. If there had been frequent sore throat with fever or if the tonsils were definitely larger than normal, it was accepted as a good indication. In a few cases because of recurrent otitis media, it had seemed advisable to remove the adenoids and the tonsils had, of course, been included in this operation. Such cases were also included among those with a good indication. Those with a story of frequent colds but infrequent sore thoat and with normal or "slightly enlarged" tonsils were grouped as having a questionable indication. Those stating that they had had few or no sore throats and whose tonsils looked normal were regarded as not presenting any indication for the operation unless the rheumatic involvement was regarded as such. Since the indications for tonsillectomy and adenoidectomy in any case are not standardized and are subject to the judgment of the individual physician, the validity of such grouping as has been attempted is open to question. However, an honest attempt was made to be objective about such classification, and it is my belief that the grouping would correspond well to the average opinion concerning advisability of operation in the individual patients.

Of the seventy-nine patients operated upon, there were twenty-eight in whom there were valid indications. The subsequent course of these patients was, of course, extremely variable. So far as the throat infections were concerned, many but by no means all of them were considerably relieved. Regarding the rheumatic activity, seven were followed for so short a time as to give no information. One patient, mentioned above, was markedly improved. Five others seemed definitely but not markedly improved. Seven, operated upon after long periods of inactivity, continued unchanged without recurrent activity during the time of observation, which was for a period of a year or two. In nine patients, there were subsequent recrudescences of considerable severity.

In twenty-three patients, the tonsillectomy and adenoidectomy was done upon questionable indications. Of these, six were not followed, one seemed definitely improved for a time after the operation, and four, quiescent for a long time before operation, remained unchanged. In two cases there was a mild recurrence of activity immediately after operation which probably was precipitated by the operation. In ten cases, there were subsequent recurrences of activity.

In twenty-eight patients, the tonsillectomy and adenoidectomy was done only because of the presence of rheumatic heart disease. Aside from this, there was nothing in the history or physical examination to suggest the propriety of the operation. Of these, six were not followed. One patient seemed better after the operation. Seven, long inactive at the time of operation, remained so during the observation period. In four cases, there were recurrences immediately after operation, and in two of these the recurrence was of marked severity. In ten cases, there were subsequent periods of activity.

In the case of these patients who had recurrences of the rheumatic process immediately after the tonsillectomy and adenoidectomy, it was interesting, but possibly not really significant, that in all cases the operation was done when there were no local indications or questionable indications for the operation.

The significance of these occasional immediate recurrences after operation is an open question which cannot be settled here. The fact that they do occur has been insufficiently emphasized in the literature, and the possibility of such occurrence is one of the things to be borne in mind when the propriety of tonsillectomy in a rheumatic patient is being considered.

It is apparent from this follow-up study of these patients that the rheumatic process in general has pursued its ordinary course uninterrupted in the majority by the tonsillectomy and adenoidectomy. In a considerable number, the first rheumatic manifestation has occurred after the tonsils were removed. In a few instances, chiefly in those who presented abundant local indication for the operation, the patient has seemed to be better for having had it. In a few cases, a first attack or a recrudescence occurred immediately after operation, and was apparently precipitated by it. In many instances there have been subsequent recurrences with progressive and at times fatal damage to the heart.

For many years tonsillectomy has been done on patients with rheumatic heart disease, in many cases only because of the rheumatism. Conflicting opinions have been expressed as to the effect of the operation upon the progress of the heart disease. It would seem that those who believe in its efficacy could have by this time presented convincing evidence of benefit. Such convincing evidence has not been forthcoming. In those studies indicating that tonsillectomized patients do somewhat better than the controls, the difference has been slight. This difference can be explained, at least in part, by rejection for operation of certain patients whose disease runs a rapidly progressive course.

Since there is little if any difference in outcome of those operated upon and those not, it does not appear that the operation should be advised solely because the patient has had some rheumatic manifestation. On the other hand, the patient with rheumatic heart disease who has definite valid local indications for operation, probably should have it done for the sake of the general improvement in health which may be expected to follow the removal of a definitely infected focus.

CONCLUSIONS

1. The removal of tonsils and adenoids does not usually modify the course of rheumatic heart disease, and the presence of this condition is not of itself an indication for their removal.

2. In the presence of definite local indication for tonsillectomy and adenoidectomy in a patient with rheumatic heart disease, it is proper that the operation be done.

3. The operation should, as a rule, not be done in the presence of signs of activity of the rheumatic infection.

4. There is occasionally an immediate recrudescence of rheumatic activity after tonsillectomy and adenoidectomy.

DISCUSSION

C. H. McCaskey, M.D. (Indianapolis): I quite agree with Doctor Meiks. He has had a better chance to study these patients than those of us who are doing private practice. I am sure his conclusions are correct and reflect his observations. His conclusions agree with those of Doctor Kaiser and others who have studied this subject, also with an article which appeared in the *Journal of the A. M. A.* recently, and which he quoted in his discussion. Doctor Kaiser has not changed his attitude on this subject a great deal from his previous report. I think his attitude is that there is some indication that the mortality in later years is less. In other words, in rheumatic fever with heart disease, where there is infection in the tonsils, the mortality has been reduced by their removal. I think all of us will agree that it is a great mistake to remove tonsils unless we have some definite reason for doing so.

I have talked to the doctor a number of times about this condition and I quite agree with all he has presented in this excellent paper.

O. G. Brubaker, M.D. (North Manchester): I enjoyed the paper immensely and I think it is timely. I am glad to know that the pediatricians have recognized that there are times when tonsils should be removed. A few years ago they disagreed on that. I think the otolaryngologists have pretty well established the idea that there are times when tonsils should not be removed. Now we are up against this proposition: the younger men coming out of the medical schools—I do not know whether they get the idea from their teachers—I would not say that, but most of them say they are going to remove tonsils, and we find a good many are doing it without much excuse other than the commercial idea.

I think it is a good thing in this kind of case to warn the parents or guardians of the child that this will not cure the rheumatism, but it may prevent future attacks.

Howard B. Mettel, M.D. (Indianapolis): I rise in behalf of the pediatric profession, Dr. Brubaker, because I see a different side. I wish to differ from the idea that the pediatricians are against the removal of tonsils. Simply because one member of the profession has gone up and down the state setting forth that idea does not mean that the rest of us are in agreement.

I want to compliment Doctor Meiks on his presentation of this subject. There are two points I would like to add to the discussion. The main one is that it is a disease very prevalent in the child population. In New York State and in the District of Columbia, rheumatic fever is a reportable disease and in those states it is shown to have a very high incidence. Second, I think one of the things that the throat men should learn is what Doctor McCaskey has mentioned, that these cases, like cases of tuberculosis, require a prolonged follow-up program. There are seven such pro-

grams going on in the United States today whereby a center like the Riley Hospital is used, augmented by public health nurses and social workers. In this way these children may be followed and given proper hygiene, care and rest.

MARLOW W. MANION, M.D. (Indianapolis): I would like to ask whether or not Doctor Meiks feels that tonsillectomy is justifiable in a child who has had no particularly unfavorable history so far as the throat is concerned, but who has a family history of rheumatic fever.

C. H. MCCASKEY, M.D. (Indianapolis): I rise in defense of medical teaching. I do not think that the medical students are taught to perform tonsillectomies unnecessarily. At the University Hospitals no intern is allowed to do tonsillectomies. I think, at the City Hospital in Indianapolis, interns are being taught to do tonsillectomies. An intern who does three or four or five tonsillectomies during a month's service surely is not qualified to do this operation, and this procedure is not good for tonsil surgery.

R. M. DEARMIN, M.D. (Indianapolis): I would like to say a world along that line. I wonder if somebody would not like to present a motion in the business meeting that this Section wishes to go on record as being opposed to interns doing surgery unless they have a residency. While we know that not all of the men coming out of medical school are doing surgery, yet many of them are doing tonsillectomies, appendectomies and hysterectomies, and it is doing the medical profession no good. Those who have positions in a teaching hospital or the City Hospital are sometimes put on the spot. In other words, if a man wishes to do specialized work he should have proper training plus his residency where he is expected to specialize in that one thing. I would like to have you think about that until our business meeting.

WILLIAM W. WEAVER, M.D. (New Albany): I would like to ask Doctor Meiks if in these cases he finds some referable to carious teeth and gingivitis, and whether some of these cases were studied with that in view?

DR. MEIKS (closing): Answering Doctor Manion, if there were any evidence that tonsillectomy would prevent the occurrence of rheumatic fever, in case an individual were exposed to the disease, it would be desirable; but inasmuch as so many children who have had tonsillectomy later develop the disease, I think there is no evidence that tonsillectomy will prevent the occurrence of rheumatic fever. My personal feeling is that if a child had no undue difficulty in the throat, it would not be a justifiable procedure.

In regard to the last question concerning the teeth, I am not aware of any studies on the teeth in relation to rheumatic fever. It is rather the exception for streptococci to be cultured in the teeth themselves unless they are also present in the throat. It is true, children with rheumatic fever do carry streptococci in the throat—in a considerably higher percentage than normal children. So far as my work goes, there was no evidence of gingivitis or bad teeth playing a role in the precipitating of rheumatic heart disease.

PHYSICAL AGENTS IN THE TREATMENT OF FRACTURES*

JOHN S. COULTER, M.D.
CHICAGO

The simplest physical agents used properly during the various stages of fracture repair, following early and accurate reduction of the fracture, will restore function, hasten recovery, and improve functional results. Physical therapy in the treatment of fracture does not require complicated and expensive apparatus. The physical agents of the greatest use in the treatment of fractures are heat, massage, and exercise. Of all therapeutic adjuncts these are the simplest, the most flexible, the most easily obtainable, and the least expensive. Their therapeutic value is largely dependent on the skill with which they are administered.

Following a fracture there is in addition to the fractured bone considerable soft tissue pathology. The care of the fracture must take precedence over the soft tissue injuries. Therefore, following reduction, proper splinting is necessary to maintain reduction. But in addtiion to the maintenance of reduction it is important to secure the early restoration of the normal circulatory efficiency of the involved region because it has been shown that delayed and non-union are traceable to an interference with the circulation at the site of the fracture.

Dickson[1] states that the application of physical therapy at this time is often difficult because the part is encased in a fixation dressing, but by the use in both bed and ambulatory cases of traction, which allows ready access to the part for physical therapy, through apertures in plaster dressings, by the use of hinged splints which allow movement in adjacent joints without disturbance of the fracture site, by the use of open splinting and by daily "setting" of the muscles, it is usually possible in most

* Presented before the first General Meeting of the Indiana State Medical Association at the French Lick session, October 30, 1940.

[1] Dickson, F. D.: Physical Therapy in the Treatment of Fractures, *J.A.M.A.*, **111**:1016, Sept. 10, 1938.

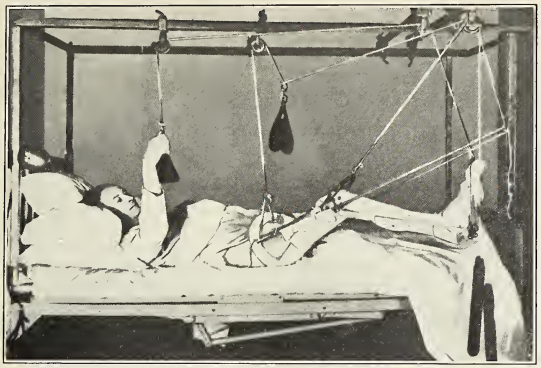


Figure 1. Early knee joint motion in a patient with a fractured femur, still in skeletal traction.

fractures to use heat, massage, and muscle contraction throughout the period of fixation to the great advantage of the patient. So-called open splinting has in recent years been used more and more in the fixation of fractures; this permits the employment of physical therapy to a very satisfactory extent. By open splinting is meant using anterior or posterior or lateral molded plaster splints to replace circular plaster dressings when possible as, for example, in Colles fractures, fracture of the patella and fractures of the ankle. Such splints afford ample exposure for physical therapy without disturbing the fracture.

It is obvious that heat and massage will not heal torn blood vessels, ligaments and muscles, but heat and superficial stroking massage will assist in restoring the circulation on which repair depends. In the open splinted fracture, taking it for granted that the fracture has been reduced and that sufficient time has elapsed for hemorrhage to have ceased, it is possible soon after reduction to apply heat twice daily for periods of 20 minutes. We use radiant heat from an electric lamp "baker." These bakers use four 60-watt lamps, and can be made by a mechanic at a cost of approximately five dollars.

The kind and amount of heat to apply to a fractured bone is still a matter of controversy. Voshell[2] believes that diathermy properly applied is of distinct value under certain circumstances of delayed union of fractures. Murray[3] believes in the early application of heat and other physical therapy because calcium deposition is associated with a high

[2] Voshell, A. F.: Delayed Union of Fractures, *Arch. Phy. Ther.*, **18**:561, Sept. 1937.

[3] Murray, C. R.: Immediate and Early Physical Therapy in Fracture Management, *Arch. Phy. Ther.*, **19**:74, Feb. 1938.

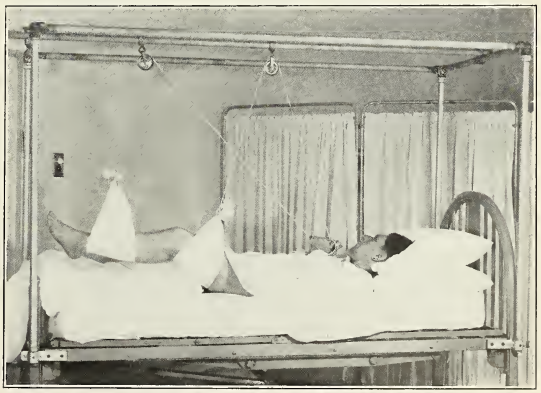


Figure 2. Sling suspension apparatus for early exercise following fractures of bones of the leg.

tissue fluid pH (relative alkalinity) and possibly the participation of an enzyme which is inactive in an acid medium. He believes that the products of tissue death, local tissue fluid stagnation (inefficient lymphatic circulation), local blood vascular stagnation (congestion), and the products of the breaking down of hemorrhage exudate all lead to and intensify a low pH. of the tissue fluids. Heat, massage, and exercise remove these factors causing acidity by increasing the lymphatic and blood circulatory efficiency. Speed[4] in his research on temperature-controlled healing of experimental fractures stated that it may be that the increased temperature conveyed to the fractured legs which were maintained within the abdomen contributed to the production of a firmer union.

On the other hand, Key and his associates[5] state that they have seen patients with local atrophy of the bones which they believe was partly caused by the enthusiastic and prolonged use of baking and diathermy.

Blair[6] recently presented a theory to show that hyperemia causes decalcification of bone, and as heat produces hyperemia, the use of heat in recent fractures is a wrong practice.

In our practice, the application of diathermy to fractures in a cast or splint has proved impractical. The use of mild heat for several periods of thirty minutes each day has proved of such value that we are convinced of its usefulness in the post reduction and after treatment stages. The application of heat can be overdone. We have seen recently two cases with increased pain and extreme local atrophy of bone which received prolonged applications of heat in the period of after treatment. These conditions improved when heat treatment was stopped and the exercises increased.

In the post reduction period with open splinting it is possible at times to use massage with advantage. In some fractures in addition to the local swelling from the local hemorrhage there is a general swelling of the limb which is often due to a reflex disturbance of the vaso-motor mechanism. In superficial stroking massage we have an agent that produces a reflex effect to counteract this vasomotor disorganization.

Superficial stroking massage consists of the passage of the hand in one direction over an area of the patient's skin with a slow, gentle, and rhythmic movement. This form of massage only aims to produce a reflex effect. The pressure should be firm but gentle and light with the hand adapted to the contour of the patient's body; the muscles of the operator's hand should be relaxed. Rhythmic movements are essential to secure an even stimulus. The direction of the movement is unimportant in this form of massage provided it is always in the same direction. For instance, on the second or third day after the reduction of a Colles' fracture, the dorsal splint is removed, and the wrist and forearm are carefully supported on the anterior splint and placed under the electric lamp baker for one-half hour. The surgeon administers superficial

[4] Speed, K., and Fell, E. H.: Temperature-Controlled Healing of Experimental Fractures, *Jour. Bone and Joint Surgery*, **21**:1005, Oct. 1939.

[5] Key, J. A.: Elzinga, E., and Fischer, F.: Local Atrophy of Bone, *Arch. Surgery*, **28**:943, May 1934.

[6] Blair, H. C.: The Alternation of Blood Supply as a Cause for Normal Calcification of Bone, *Surg. Gyn. & Obs.*, **67**:422, Oct. 1938.

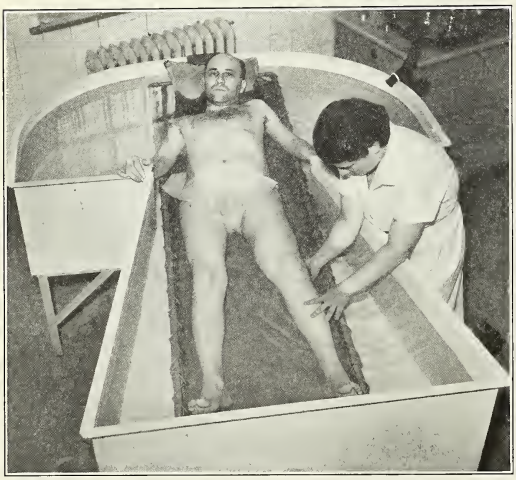


Figure 3. Underwater exercise, fractured femur, in a Habbard Tank.

stroking massage over the entire dorsal surface of the forearm, wrist and hand. The dorsal splint is then reapplied and the nurse holds the dorsal splint and the arm while the anterior splint is removed and the flexor surface of the forearm, wrist and hand is massaged by the surgeon. The splints are then reapplied. The surgeon directs the technician to give daily massage and exercise to the fingers, thumb, elbow and shoulder. At the end of a week the forearm is removed from the splints for the treatment and relaxed motion is started.

In the post reduction period, exercises may be used also while the limb is in the splint if the physician will give definite directions. Especially useful is "muscle setting." This consists of the alternate contraction and relaxation of a muscle or muscle groups without producing joint motion. In a case of fracture of the leg, the patient is taught to contract and relax the quadriceps muscle without movement of the knee. In cases requiring the arm to be placed in an abduction splint, the patient should exercise the deltoid without shoulder movement. These exercises should be practiced under the watchful eye of the operator until the patient has mastered them. Their importance should be stressed as they help to maintain muscle tone and prevent atrophy.

The patient during this period should be definitely instructed to use the other muscles of the limb not in the cast. In a Colles' fracture, with the wrist and forearm in a cast, the fingers and thumb can be exercised by squeezing a soft hollow rubber ball. The elbow and shoulder may be exercised by brushing the hair with the palm of the hand starting from the front and continuing to the occipital region.

In leg fractures it is likewise possible to exercise muscles not involved in the cast. In a fracture of the neck of the femur with skeletal traction and a Thomas splint, early knee joint motion may be started as shown in figure one. When the splint is removed, exercise is continued by the sling suspension method as is shown in figure two.

Underwater exercise is the most important physical agent used in the treatment of fractures. Every hospital should have a Hubbard Tank. (See figure three.) All fractures of weight-bearing bones and fractures of the humerus can be exercised in this tank to advantage. The buoyancy of the water eliminates the gravitational load and allows exercise with the least possible strain on the injured bones and muscles. Often these cases are placed in the water with the splint on the injured limb and the splint is removed when the water supports the limb. In fractures of the foot, ankle, hand, wrist, and elbow the whirlpool bath is used for underwater exercise.

Early mobilization is possible with the sling suspension apparatus and underwater exercises. The surgeon should take the time to direct the first few treatments. Early mobilization is most important in fracture treatment. Wright[7] recently stated: "When you immobilize, IMMOBILIZE! But, do not over immobilize. Institute mobilization as soon as it is safe. This is best applied by evidence of clinical union and not by 'roentgen union.' The first is early while the second is late, sometimes too late. Treat the patient, not the x-ray film. Early mobilization conserves function. Conserved function does not require the regaining of lost function. An ounce of prevention is worth a pound of cure.

"Abandon solid plaster casts whenever they are not absolutely necessary as they hide the pathology and prevent the maintenance of the normal physiologic state. Solid plaster casts, when not indicated, usually mean 'out of sight, out of mind.' Certainly, they prevent early physical therapy, early mobilization!"

Passive exercises, if they are forced movements, have little place in fracture treatment. True passive movement is better named relaxed movement. This is joint movement performed by the surgeon

[7] Wright, V. W. M.: Practical Fracture Physical Therapy-Surgical Clinics of North America, Dec. 1937. W. B. Saunders & Co., Philadelphia.

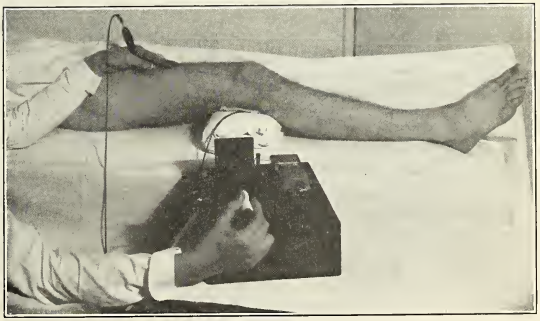


Figure 4. Electrical muscle stimulation with home made faradic coil.

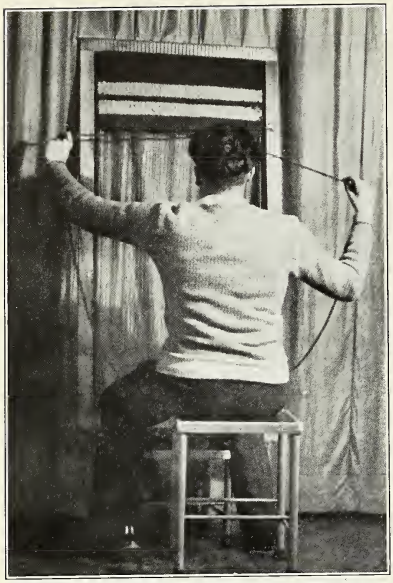


Figure 5. Rug weaving on a home made frame is an exercise to increase shoulder abduction and external rotation.

without assistance or resistance from the patient. What usually happens with passive exercise is that it becomes forced movement or stretching, not usually stopped at the point of pain, and may produce damage. True relaxed movement given by an experienced operator is most valuable in elbow fractures in children to prevent joint stiffness.

In giving early relaxed motion the patient should be in a comfortable position, and the limb should be supported by the surgeon whose hands should rest over the muscles controlling the joint motion. The first motion should be through a small arc and a slight tensing of the muscles is a signal to stop the motion.

The advantages of assistive active exercises such as underwater and sling suspension methods are that the patient's sense of pain prevents a strain being thrown on soft callus, they enlist the patient's cooperation, he gains confidence to use his muscles, and he loses his fear of movement of the injured limb.

In prescribing exercises, we give definite directions and have prepared a mineographed sheet of exercises for each joint. For many exercises an apparatus is used which can be made by a local carpenter. (These sheets of exercise directions and plans for making exercise apparatus will be furnished on application to the author.)

When one of the bones of the leg is fractured there is always a long period of inactivity during which the power of muscle coordination is impaired. Since all movement, particularly in walking, is the result of the contraction of one group of muscles combined with the relaxation of its antagonistic muscles, the efficient working of one muscle is dependent on the efficiency in many other muscles. Therefore, in a case of fracture of the leg, marked weakness of one group of muscles interferes greatly with proper coordination in walking at first. Too often a patient is allowed after weeks of wearing a cast to start weight-bearing on his injured leg without previous exercise and even without normal support afforded his foot by a shoe. This patient gets up on crutches, his feet usually in slippers, and attempts to walk with his hip rotated externally, his knee stiff and his foot everted, thus causing still further muscle strain and loss of coordination. In the proper treatment of such a case, reeducation in walking is essential.

While the muscles are weak and assistive exercises are necessary, painless muscle contraction by electrical muscle stimulation (faradic current) is useful in the restoration of circulation and causes physiologic contractions with changes dependent on such contractions and with the mechanical effects due to the direct movements of the joint. An apparatus for this purpose that can be made for about five dollars has been designed. (Fig. 4.)

Any physician can arrange for patients to have occupational therapy. In most cases of injury it is not possible to send them to a curative workshop following physical therapy. The ordinary physical therapy given to a patient, at the most, lasts only an hour and the exercises have certain definite limitations. The human body is more than a machine, and the formal repetition of a movement either with or without an apparatus is not of maximum therapeutic value in increasing the amount of movement in a stiff joint or as an integral part of a larger coordinated movement, because there is no psychological stimulant for personal incentive or sustained effort. Occupational therapy can be applied at home if the physician will give the necessary directions to the patient and a member of the family. For example, in arm injuries where it is desired to secure increased shoulder abduction and external rotation, rug weaving may be done on a home-made loom with the frame placed high enough to give shoulder abduction and the work directed to give shoulder external rotation. (See Fig. 5.) If the deltoid muscle is weak, a sling weight and pulley arrangement will aid in maintaining shoulder abduction.

In conclusion, it is emphasized that the physical agents of the greatest use in the treatment of fractures are heat, massage, and exercises. These physical agents used properly following early and accurate reduction of the fracture during the various stages of fracture repair will restore function, hasten recovery, and improve functional end results.

RECURRENT HYPERTHYROIDISM*

RICHARD L. HANE, M.D.
FORT WAYNE

Where etiology is unknown treatment cannot be expected to attain perfection. That this is true of the surgical management of hyperthyroidism is no longer seriously questioned. Clute has most aptly stated that those who contend that operative failure does not occur either avoid the evidence or do not follow their patients. In spite of the attempts at substitute forms of treatment, surgery remains our most dependable means of restoring the hyperthyroid patient to health with minimal damage to associated body structures. Our concern here is with the incidence of return of symptoms and the possible explanations for incomplete results.

Closer agreement is needed in a definition of recurrent hyperthyroidism so that distinction is made between true recurrence and the persistence of symptoms after operation. This distinction should lie in a postoperative return to normal metabolic levels with the associated physical improvement dependent upon the control of hyperthyroidism. Some writers have attempted to establish a definite time interval so as to more accurately judge those instances of true recurrence. Cattell designates an interval of six months freedom from symptoms, Jackson specifies three months, and Clute two months. While little benefit may come from establishment of any such time interval, yet it is important to understand that true recurrence arises from the very nature of the disease itself while persistent hyperthyroidism is a reflection upon the technic employed.

The problem of recurrent hyperthyroidism is largely concerned with the diffusely hyperplastic or exophthalmic type of goiter. When secondary symptoms appear after removal of a nodular or adenomatous goiter one can assume that either the thyroid remnants have been of the hyperplastic type or that small adenomata have been left which later grow and produce an excess of secretion.

In the surgical treatment of diffusely hyperplastic goiter, a certain school of thought explains all recurrences on inadequate surgery. One is forced to admit that the timid approach which fails to adequately expose the lateral lobes of the thyroid gland, which fails to search for retrotracheal projections and pyramidal lobes and which is ultraconservative in the remnants of tissue left is often productive of incomplete relief of symptoms. Bowers, in a review of 302 cases, the work of eight surgeons, found that the recurrence rate among these operators varied from 0.% to 18%. Pemberton and Haines are of the opinion that inadequate surgery is not the sole factor in recurrent symptoms. They cite three patients in whom actual myxoedema developed postoperatively and who later developed true recurrent hyperthyroidism. Jackson and Else think that failure to provide an iodin ration postoperatively is a factor in recurrent hyperthyroidism. Cattell and Morgan's study showed a lack of iodin in the postoperative period to be a negligible factor. Sloan believes that a persistence of foci of infection may have something to do with the secondary appearance of hyperthyroidism. Perkins and Lahey have called attention to a low or normal blood iodine level preoperatively in those patients who later develop recurrent symptoms. Frazier in a review of his cases found that where the duration of the disease had been less than three months no recurrence appeared. Other factors with undoubted influence are infection, prolonged mental or physical fatigue, pregnancy, menopause, shock and worry. It need always to be considered that the surgical treatment for hyperthyroidism is entirely different from such a procedure as appendectomy. One should not expect patients to return to pursuits for which they were inadequate prior to their surgery.

In appraisal of statistics relative to recurrent hyperthyroidism, it is important to avoid those studies made prior to the use of iodine in preparation for surgery. This was the day of incomplete procedures necessitated by the fear of severe postoperative reactions. One can rely on such studies as those of Cattell and Lahey, who showed that in 4,956 cases they had recurrence of symptoms in 3.7% and persistence in 2.4%. Coller's report of 4.8% does not vary greatly from other reports. Joyce reports his recurrence rate as 5.7%, Buchbinder his as 3.3%, and Young his as 2.71%. Pemberton reviewed 1,683 cases after seven to nine years had elapsed from the time of surgery and found that 2.9% developed recurrent manifestations. Clute followed 100 cases for five years, checking at frequent intervals with physical and metabolic examinations. Six of these 100 cases required further surgery, three for recurrent hyperthyroidism and three for persistent hyperthyroidism.

To gain a more concrete idea of the efficacy of surgical treatment of goiter in Fort Wayne a study was made of case histories from St. Joseph Hospital. In order to give proper appreciation to this study it should be added that the treatment of hyperthyroidism in our city tends to be conservative and many of these patients came to surgery only after the failure of radiation and medical measures.

To determine the proportion of goiter patients undergoing secondary operations a study of case records during the period of January, 1925, to

* Presented before the Section on Surgery of the Indiana State Medical Association at the French Lick Session, October 30, 1940.

July, 1940, was made. During this time there were 209 patients who were treated by subtotal thyroidectomy. Classifying these as to types of goiter we find that there were ninety-one adenomatous goiters, 104 diffusely hyperplastic or exophthalmic goiters, six simple colloid goiters, five carcinomata, and one struma lymphomatosa as described by Hashimoto. There were eleven deaths, which gives a gross mortality rate of 5.26%. Severe postoperative reactions were responsible for four deaths, cardiac complications accounted for three, two followed postoperative hemorrhage, facial erysipelas in an aged patient produced fatal result in one patient, and one patient died soon after termination of surgery from what was considered to be operative shock. In this group of cases there were nine patients (4.3%) who were undergoing secondary operation; eight were being operated upon the second time, and one had three operations. Of these nine patients, five had goiters of the diffusely hyperplastic or exophthalmic type, and four were of the adenomatous type. It is interesting to note that the intervals between the primary and secondary operations in the adenomatous goiters were ten years, twelve years, fourteen years, and nineteen years. Of the diffusely hyperplastic or exophthalmic goiters requiring secondary surgery two should be classified as persistent hyperthyroidism. In one of these lobectomy and double ligation had preceded the secondary operation by five years; in the other hemorrhage encountered at surgery had prevented satisfactory completion of the initial operation. There were three true recurrences of exophthalmic goiter, two of which will be mentioned in more detail.

Scott has mentioned the axiom that "Once a recurrence, 'oft' a recurrence." Young, in a study of thyroid surgery at Duluth hospitals, reports seven patients requiring three operations, and one required a fourth operation. Jackson in 1934 reported four instances of third operation, and one of fourth. It would seem that a certain small percentage of exophthalmic goiter patients for unknown reasons seem destined to produce recurrent symptoms and thus parallel the experience in duodenal ulcer where certain ulcer producing patients continue to have recurrent ulceration in spite of increasingly radical surgery. This is illustrated in the following two cases:

Case 1. A woman, now 49 years of age, with typical manifestations of exophthalmic goiter, had been completely relieved of her symptoms for six years following her primary operation. However, secondary operation was not carried out until thirteen years following the primary operation. She again experienced complete recovery for eleven and one-half years, but now reports that again is having tremor, tachycardia and what she describes as a general breakdown of health. She is a possible candidate for a third operation.

Case 2. A male, now 38 years of age, was first seen in April, 1937. Complaints of nervousness, palpitation, weakness and ease of fatigue had been present for three months. There was a definite stare to the eyes but no actual exophthalmos, the thyroid gland was diffusely enlarged to about three times normal size and there was marked tremor of the extended fingers. Wassermann reaction was normal and basal metabolic reading gave a result of plus 44.

The usual preparatory regime of iodine, high calorie diet and rest reduced this but to plus 36 at the time of surgery, April 17, 1937. Sub-total resection and removal of a pyramidal lobe was done on a typical diffusely hyperplastic thyroid gland. Tissue to approximate one-third of a normal sized lateral lobe was left on either side.

Postoperative convalescence resulted in return to apparently normal physical status for about two months. Exophthalmos then appeared and somewhat later general manifestations of recurrent disease. At the patient's request he was referred for x-ray treatment and a total of nine treatments given without apparent benefit. With the cooperative guidance of an internist full benefit of a medical regime was carried out. Basal metabolic rates at this time varied from plus 44 to plus 75. A nodule the size of a golf ball appeared to the left of the trachea and eleven months following the primary operation the thyroid area was again opened and this tissue, weight 15.6 grams, was removed. The tissue on the right of the trachea was not hypertrophied at this time. One month after the second operation the basal metabolic rate was plus 10 and all indications promised definite recovery.

After three months symptoms again appeared, and five months after the second operation the basal metabolic rate was plus 52 and a large palpable enlargement was present to the right of the trachea. The third operation was done February 24, 1940, less than two years after the primary operation, and a total of fifty-seven grams of thyroid tissue was removed from the right side of the neck. Basal metabolic rate is now minus 7, exophthalmos has markedly improved, and the patient is again gainfully employed.

A special study was made of the patients operated upon during the years 1925 to 1935 inclusive. Questionnaires were sent inquiring as to the possible appearance of symptoms since time of surgery and as to the possible necessity of further surgery. There were 162 patients in this group. Six deaths produced a mortality rate of 3.7%. With the combined help of patients' physicians and the questionnaire it was possible to trace 122 of the above group. These included sixty-two who had diffusely hyperplastic or exophthalmic goiter, fifty-six with nodular or adenomatous goiter, two with colloid goiter, and two with carcinomata. But one patient had required a second operation, and this was a patient with a typical nodular goiter with mild hyperthyroidism. Ten years had elapsed between her two operations. There were seven additional

patients who reported either a return of symptoms or incomplete relief. Five of these had goiters of the exophthalmic type, one was an adenomatous goiter, and one had been diagnosed in our hospital as a carcinoma. Of the exophthalmic goiters giving further symptoms, two, or 3.2%, can definitely be considered true recurrent hyperthyroidism, and three, or 4.8%, persistent hyperthyroidism. Four of the five exophthalmic goiter patients who had further symptoms have been treated conservatively and have improved. One patient would seem to be a candidate for further surgery.

The treatment of recurrent hyperthyroidism must include the prophylactic management as well as any active measures indicated. It is my personal belief that the surgeon of the small city has a certain advantage in the postoperative management of these patients. In such communities he more or less lives with his patients and thus can extend his period of postoperative observation. The judicious advice and sympathetic regulation of their future activities he should be able to give and indeed these patients need this type of personal interest. If we are to place any importance in an emotional drive or a nervous drive as a primary etiological factor in hpyerthyroidism then it is only reasonable to eliminate in so far as possible any factors of this nature.

Elimination of any focus of infection is a procedure to be commended. This can be more safely carried out in the postoperative period in that no longer is it possible to initiate crisis.

Postoperative hospitalization except in the exceptional case need not be prolonged if the surgeon is willing to carry out further care in the home. Most patients are able to leave the hospital a week to ten days after surgery. The family of the patient must understand and provide a home atmosphere conducive to rest and quiet. The patient is permitted increasing physical activity but always within the limits of fatigue.

The high calorie diet is continued with no restrictions other than the total elimination of coffee. I believe that a most informative help is given the surgeon by the patients keeping a daily weight chart, the weight being taken at the same time each day and under similar conditions. Basal metabolic rates may be taken to check or corroborate clinical impressions of improvement or return of symptoms.

Being personally convinced of the value of iodine in postoperative management, a routine is made of prescribing Lugol's solution, ten drops three times daily for ten days, and thereafter ten drops daily for ten weeks. This iodine medication is not given to uncomplicated cases of adenomatous goiter.

Any failure of normal improvement calls for increased rest and if need be some form of sedative. Where mild recurrent symptoms are manifest a regime of iodine medication, rest and sedatives is continued. Roentgen therapy may be tried and if ineffective one should consider further surgery. Where there is palpable increase in the thyroid gland remnants coupled with objective and subjective findings with the consequent elevation of the basal metabolic rate one need not delay secondary surgical treatment.

Additional hazards plague the surgeon in secondary thyroid surgery. If proper mobilization of the thyroid gland has been carried out at the first operation one is certain to find a considerable growth of fibrous tissue which makes dissection difficult. The carotid sheath may be adherent to the enlarged recurrent growth and unless dissection is carried out with caution a hemorrhage of major proportions may have to be dealt with. The previous ligation of blood vessels results in a collateral circulation which bleeds profusely in unexpected areas. The site of the recurrent laryngeal nerves may be altered by the new growth of tissue and hence the area of vulnerability is widened. Parathyroid insufficiency should be prevented by preserving any structure grossly simulating a parathyroid gland. Technical difficulties, however, should not prevent the surgeon from offering to his patient this chance of recovery from existing disease.

CONCLUSIONS AND SUMMARY

1. Recurrent hyperthyroidism has been defined as the postoperative return of symptoms after a postoperative period of normal metabolic level with associated clinical improvement.

2. A review of thyroid surgery at the St. Joseph Hospital of Fort Wayne shows that 4.3% of patients undergoing operations on the thyroid gland were being operated upon for the second or third time.

3. The long intervals between primary and secondary operations suggests that many studies heretofore made have not allowed sufficient time to elapse for the complete evaluation of recurrence.

4. A follow-up study on 122 patients disclosed that 6.5% had further trouble related to the thyroid gland. Of the exophthalmic goiters of this group 8% had either recurrence or persistence of symptoms.

5. Postoperative management is highly important and need be extended to a guidance of the patient's future activities.

201 MEDICAL ARTS BLDG.

FACE ERUPTIONS DUE TO NAIL POLISH MAY BE IMPROPERLY DIAGNOSED

Because skin eruptions due to nail polish are more likely to occur about the face than the nail folds or other parts of the hands, many cases may not be properly diagnosed, Lester Hollander, M.D., Pittsburgh, observes in *The Journal of the American Medical Association* for November 16.

He reports three cases in which the eyelids and areas of the chin below the lower lip were involved. "This must have occurred by contact," he says, "such as straightening the eyebrows with the lacquered nails and possibly by the habit of playing with the areas on the chin." In one case the left side of the neck was involved, due to the patient's habit of doubling her hands and keeping her nails against her neck during sleep. In no case were there eruptions on the hands.

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DECEMBER, 1940

Editorials

PLATFORM OF THE AMERICAN MEDICAL ASSOCIATION

The American Medical Association advocates:

1. The establishment of an agency of federal government under which shall be coordinated and administered all medical and health functions of the federal government exclusive of those of the Army and Navy.

2. The allotment of such funds as the Congress may make available to any state in actual need for the prevention of disease, the promotion of health and the care of the sick on proof of such need.

3. The principle that the care of the public health and the provision of medical service to the sick is primarily a local responsibility.

4. The development of a mechanism for meeting the needs of expansion of preventive medical services with local determination of needs and local control of administration.

5. The extension of medical care for the indigent and the medically indigent with local determination of needs and local control of administration.

6. In the extension of medical services to all the people, the utmost utilization of qualified medical and hospital facilities already established.

7. The continued development of the private practice of medicine, subject to such changes as may be necessary to maintain the quality of medical services and to increase their availability.

8. Expansion of public health and medical services consistent with the American System of democracy.

THE FRENCH LICK SESSION

Registration: 1,064* with the probability that two hundred or more failed to get to the registration desk, situated as it was 'way back in the corner. (This is not a criticism; exhibitors justly insist that the registration desk be placed so that registrants will pass through the exhibit section.)

Though the first day of the convention was somewhat uncomfortable because of rain, sunny skies prevailed most of the time after that. The golfers and the trap and skeet shooters, however, were not deterred, and all sport programs were carried out according to schedule.

In golf, Dr. Robert Acre of Evansville won the Rhamy-Van Buskirk championship cup for first place with a low gross score of 80. Dr. T. L. Cooper was second with 81 and Dr. Neal Baxter was third with 83. First prize for low net score went to Dr. L. H. Kornafel, second to Dr. C. E. Cox, and third to Dr. A. J. Rarick.

In the skeet shoot, Dr. J. R. Logan of Evansville won first place and Dr. John MacDonald of Indianapolis was second. In the trap shoot, Dr. John Lansford of Redkey and Dr. L. A. Ensminger of Indianapolis were winners; in the second division Dr. Byron Nixon of Farmland was first, and in the third division, Dr. J. R. Dillinger of French Lick was first.

It soon became evident that everybody present was there with the intention of enjoying both the entertainment and scientific programs to the fullest extent and there was plenty of variety in both programs. County and district society members proved to be perfect hosts—all of them seemed to have closed their offices for the occasion and were set on just one thing, the entertainment of their guests.

Though the meeting was held in late October, Dame Nature was at her best; it was as if barrels upon barrels of the brightest hued paints had been distributed lavishly over the foothills of the Cumberlands. Even the birds and the small animals, notably the squirrels, joined in the reception of Hoosier physicians at French Lick. The main entrance to the hotel was a florist's bower, the stairs being lined with 'mums of every size and hue, and each seeming to say, "Welcome! We are glad to have you with us!"

The various programs went off without a single hitch. Speakers kept within the time limits set (save the House of Delegates where the usual number of strong-lunged artists held forth in an attempt to beat former records). Numerous guest speakers expressed themselves as being glad to be with us and to lend their aid in making this one of our outstanding conventions.

The annual banquet really was tops. The selection of guest speakers was indeed a very happy one, for Frank Lahey was in his best vein and his hearers were ever on the alert lest they miss a

* Members, 593; women, 364; men guests, 49; exhibitors, 58.

salient point of his numerous quips. Walter (Mickey) McCarty, managing editor of the Indianapolis *News*, wrote his name amid the long list of Indiana literati with an address that teemed with wholesome, old-time Hoosier philosophy, interspersed with an occasional story or episode resulting from his long newspaper experience. It was an unusual dinner party, for genial Tom Taggart had seen to it that the pre-dinner cocktail session was short but good while it lasted, hence all guests were just "sitting pretty" when the dinner hour came.

Altogether, it was one of the best meetings in our long experience with such Indiana gatherings. The scientific programs were well planned, and attendance upon these was much greater than usual.

At the last session of the House of Delegates, officers were elected as follows:

President for 1940 (elected last year): A. M. Mitchell, M.D., Terre Haute.

President-elect: M. A. Austin, M.D., Anderson.

Treasurer: A. F. Weyerbacher, M.D., Indianapolis.

Delegates to the A.M.A. (two years): H. G. Hamer, M.D., Indianapolis; George Dillinger, M.D., French Lick. Alternates: A. S. Giordano, M.D., South Bend, and J. E. Ferrell, M.D., Fortville.

The meeting place for 1941 was selected: Indianapolis.

Detailed reports of the meetings of the Council and of the House of Delegates will be found in this issue of The Journal, under "Societies and Institutions." "Convention Notes" in this issue contain comments on various features of the convention.

PROPAGANDA OF THE RIGHT SORT!

A conversation with a local business man has set us thinking. "What is wrong with American Medicine, and what are you doing about it?" he asked. We had stopped in his place of business to make a purchase and when that transaction had been completed, he stated that he would like to ask some questions about the medical profession.

It developed that this man had an amazing knowledge of the attempts to foist a system of socialized medicine upon this country; he talked intelligently about the panel system in England; about Red Medicine in Russia; he was fully aware of the activities of the heads of the various foundations and funds who, at one time or another, had "stuck their necks out," to use an expression frequently employed by Thurman Rice. In fact, this man talked with the assurance of knowing more than a bit about his subject.

A moment later he was asking many questions about these things, for most of which we had the answer. He was especially interested in the Federal suit against the American Medical Association, et al, likening many of its phases to similar actions against American business.

Then he veritably opened up! "Why is it," he asked, "that so few of your doctors know *anything* about these matters? Only the other day there were two physicians in my store and I asked them a few questions similar to those put to you a bit ago. In both cases the answers I received were worse than elementary, they did not answer the questions and, in fact, they were bald misstatements of facts!"

Much can be learned from this: First, it is a very plain fact that it is the duty of every physician to inform himself on the various economic problems that are now before the profession. Second, no physician has the right to discuss matters *about which he knows nothing!* There are literally thousands of Indiana folk who are interested in our problems and who are asking questions about them. These folk are entitled to intelligent, informative answers and many of them, after receiving such answers, can and will be of material assistance to us in our program of combatting the socialized medicine advocates.

True, it may be said that just now there is a lessened demand for socialized medicine but that, in our opinion, is due to the fact that this same group is too busy in other quarters. Many of them have been engaged in one of the hottest political campaigns in many decades; others are more or less concerned with the European situation. The campaign is past; the European situation cannot last forever, so it is that we believe these opponents will again come forth with a lot of new ideas and the fight will begin all over again.

No American physician can afford *not* to know the answers; if he does not know them now, it is high time for him to begin reading his journals, and to contact his local medical society secretary who has, or can get for him, plenty of informative material. We want the layman to help us, but if we do not know the answers, how are these laymen to be informed?

Just one other point; if you are asked about such matters and do *not* know the answer, for the love of Hippocrates, keep mum!

WHAT ONE COMMITTEE IS DOING

Not long ago a friend of ours whose duties take him pretty well over the country and bring him into intimate contact with medical organizations in every state, said something like this: "It is easy to understand why the Indiana State Medical Association is such an up-and-doing organization; you have numerous committees, but they all seem to work." And that is true; our Association *does* have a lot of committees; in fact, along about the time several new ones were formed we were inclined to wonder if we were not overdoing in this regard. Now we have the answer—we *do not* have too many committees, for the simple reason that

each one of them is doing its stint and doing it well.

We wish we might have had time to attend all committee sessions during the French Lick convention. We could have learned much from them. Some met in informal groups about the hotel, several of them having a "committee breakfast"; it is one of these that we wish to mention here.

There was a breakfast meeting of the Conservation of Vision group, a relatively new committee in our organization; true it is that at times such a committee is named, usually for some specific purpose, but in the last few years this committee has "gone to town," notably in 1939 and in the present year. Last year this committee, in connection with the Section on Ophthalmology and Otolaryngology and the Indiana Academy of Ophthalmology and Otolaryngology, sponsored a special Conservation of Vision number of THE JOURNAL and a right good job they did of it, if we may judge from the comments received from within and without the state. Next May this same group will again have such a number, though the topics discussed will be along somewhat different lines.

Some forty eye physicians attended this breakfast conference, with Dr. C. W. Rutherford in charge, who limited the speakers to three minutes. As most of these had been assigned topics in advance of the meeting and had been told that the time limit meant just that, the meeting was of the rapid-fire order, yet plenty of time was given to present many of the conservation problems that are now perplexing eye physicians.

As the result of this conference, it is believed that no longer will there be any pussy-footing about this conservation of vision business; this committee means business and this committee has the backing of practically every eye physician in Indiana! This committee means to ferret out all irregular, incompetent practices in relation to conservation of vision and to see to it that these evils are removed.

Our point is this: here we have a committee (and it is but one of the dozens that are just as active in Association affairs) that finally has determined to go places and to do things—and we firmly believe they will do just that. It is our further opinion that along about the time of the 1941 session, in Indianapolis, this committee will make a report that will bring forth the expressed admiration of the whole of Indiana Medicine.

THE WOMAN'S AUXILIARY

It definitely was made clear at the French Lick session that the Indiana State Medical Association has a strong ally, one that seems to have been somewhat overlooked in past years. We refer to the feminine portion of the doctor's household. For some years past we have watched the growth of the Woman's Auxiliary, wondering the while what it was all about; now we seem to have learned the answer.

This movement had a rather slow growth in Indiana, whether because of lack of enthusiasm on the part of the women themselves, or because of lack of proper encouragement on the part of medical Indiana (probably the latter) we do not know, but we do know that now the Auxiliary has become an irresistible force; these women folk mean to do things and they are doing things.

The Auxiliary programs at the recent convention convinced us of their sincerity in wanting to be of service to the medical profession. As a matter of fact, when a survey was made of their program for the coming year, we were a bit skeptical and thought it a rather large undertaking. But, as some one long ago said, "Women are women and as such are unpredictable!" But we predict!

This prediction is that the women of medical Indiana will come through with a well prepared program, a program that will be of material interest and benefit to the Indiana State Medical Association. One point in their 1940 program is to create greater interest in the A.M.A. publication, *Hygeia,* that little health magazine that deserves far greater support from the medical profession than it now receives. Our women folk are seeing to it that *Hygeia* is to be introduced all over Indiana, not alone in the homes of physicians but in our libraries, our women's clubs and all such places.

THE JOURNAL stands ready to render every possible assistance to our feminine allies and bespeaks for them the support of all county medical societies. As a matter of most humble confession, we might say that for several years we personally though rather quietly opposed the organization of such a group in our own county. Despite this, a year or so ago such an organization was founded and we now have seen the error of our ways—we definitely are *for* the group. We would strongly urge, however, that such "chapters" be under the guidance of the county medical society; it is our opinion that all plans of activity should first be submitted to the officials of these societies or to a special committee named for that purpose. After all, the Auxiliary is just that, an adjunct to the local medical society, and as such should be under some degree of observation.



Editorial Notes

Latest information from Washington is to the effect that members of the Induction Boards will be selected from members of the Medical Reserve Corps insofar as is possible.

J. B. Maple, retiring Editorial Board member, in discussing a request that the Woman's Auxiliary be accorded full privileges of THE JOURNAL, especially in the matter of publishing their annual county reports, remarked, "Let 'em have everything they want; no, I'll change that—let them have everything they want, in reason!"

We of THE JOURNAL herewith express our appreciation for the help received during the past three years from the two members of the Editorial Board whose terms expire this year—Drs. J. B. Maple and Pierce MacKenzie. They have been of material assistance to us during their terms and we trust that they will continue to send us occasional editorials, notes and comments. They have been succeeded by Drs. Herman N. Baker of Evansville and Lall G. Montgomery of Muncie.

Too often the mishandling of accident victims, particularly victims of automobile accidents, is responsible for more serious damage to the injured person than the accident itself. Safety campaigns throughout the country are now incorporating in their programs suggestions for the proper handling of such cases. It is an easy matter to bring about a compound fracture, when the accident resulted in one of the simple variety; crushed ribs too commonly are forced into the lungs of the victim by improper handling, and tissue injuries that prove to be most serious frequently result.

The promotion of Maynard Austin from a long service in the Council, many years as its chairman, to the post of president-elect, is a merited one. Through the years he has acquired an intimate knowledge of the problems of the medical profession, both in the state and in the nation, and we predict for his administration in 1942 a great measure of success.

What is there to be said about the election that has not been said? The lay press, the famous "commentators" (of whom we seem to have too many), the radio blasters—all have had their say. Yet, no one seems to have given the answer to the question, "How come?" We shall not attempt the task; we held a national election, the votes have been counted, most of the headaches have cleared up, so what? The Indiana situation intrigues us. We've lived here a long time and have been voting (we hope intelligently) since November of '96; and we never before have seen anything like it. A Democratic Governor and a legislature so strongly Republican that it seems it would topple the State House askew! As we now view it, there is naught to do but sit as patiently as possible and await the answer. Our subscriptions to down-state newspapers are being kept alive so that we may miss none of the show. From information coming to us from many sections of Indiana, it would seem that our profession will not fare so badly in legislative matters.

Dr. Floyd T. Romberger of Lafayette succeeds to the chairmanship of the Council, replacing President-elect Austin. "Rommy" brings to his position a full knowledge of the requirements of this position, for he has been a member of that body since early in 1925, and in that period has been an active participant in its various functions. We know of no one better advised as to what Indiana Medicine is trying to do and certainly no one who is more conversant with our Constitution and By-Laws than Dr. Romberger. For some time to come we shall no doubt hear much from this man as to what is going on medically in the "Sovereign State of Indiana."

The Editorial Board met during the French Lick session, making many plans for 1941. Among other suggestions adopted was the featuring of a series of articles on the "Twelve Great Killers," carrying out the 1940 program of the Publicity committee. It also was recommended that essayists for the annual session discontinue the practice of sending in abstracts for use in the convention number of THE JOURNAL. This number is always a crowded one, what with the routine matters and the printing of the committee reports, as well as those of Association officials. Book reviews have been somewhat neglected lately but will be looked after by two Board members who have assured us that this department will be brought up to a high standard.

Just when it seemed that Indiana's Harger was all set to have his "drunkometer" generally adopted by the courts of the land as an infallible index of

the degree of intoxication in an individual, along come Newman and Fletcher of San Francisco with an article published in *The Journal of the American Medical Association* for November 9, 1940, in which some question is raised as to the "standards to be established." They do not discount the Harger apparatus in any way, but they do maintain that minimum standards of skill in operating motor cars should be established to apply to individual drivers. The imbibing of intoxicants to such a degree as to cause a deviation from this standard, plus the detection of alcohol in the blood, should be sufficient evidence for a conviction. The authors conclude that "if any blood alcohol concentration is to be accepted as absolute evidence of intoxication in the legal sense, it is essential that it be one at which experience has shown that no individual, regardless of his inherent or acquired tolerance, would be clinically adjudged sober."

Most county medical societies hold their annual elections in December and we urge that due consideration be given to the naming of officers for 1941. Always an important matter, the election of officers during the coming year calls for an unusual alertness on the part of the component societies of our state. Probably the most outstanding problems for the coming year will be those incident to the military training of our young men. The examinations of this group are about to begin and will continue for a long time to come. We feel that the selection of physicians all over the state to conduct these various examinations—a big job in itself—has been very carefully and conscientiously done. Certain it is that the Indiana State Medical Association has had a big part in these selections. It now becomes the duty of every county medical society in Indiana to see that the work of this group is smoothly, efficiently and expeditiously carried out. Leaders are needed in our county medical societies as never before. See to it that your group chooses the most qualified men in your county.

The following editorial is "lifted," with due acknowledgment, from the *New York State Journal of Medicine* for November 15, 1940. It contains some rather startling news to the effect that, at long last, the general practitioner is to have a section all his own in the Westchester County Medical Society. This county is located immediately north of New York City and east of the Hudson river, a very populous section. We do not know the number of members in this militant organization, but we do know that it is one of the largest groups outside the large cities of the country. Our only comment is that we are more than pleased to learn that this general group is to be so fittingly recognized, and while it may be true that a hornet's nest is about to be stirred up, we are for the hornets. The editorial follows:

THE HORNET'S NEST

The recent formation in the Westchester County Medical Society of a general practitioners' section marks the beginning of a movement which should have every encouragement and stimulation. The various specialties have long been organized with beneficial results not only to their own smaller groups but to the enhancement of the interests of the profession generally. The general practitioner, however, the front-line man of medicine, has been kicked about. Everybody has told him where to get off. Educators, his brethren the specialists, editors, research students, pharmaceutical detail men, his patients' relatives, and advertisers have had him in a sort of protective custody which at last, seemingly, has produced a reaction toward consolidation.

The organization of such a reactive movement will not be without its difficulties. In the ranks of the general practitioners are some of the staunchest individualists in the profession of medicine. A general practitioners' section once in session should have many of the well-known characteristics of a hornet's nest. But we think some nests of that kind are badly needed here and there. The call at the moment is for competent leadership of these sections. Little will be accomplished if the hornets merely mill around and sting each other in the mere sensuous enjoyment of their exuberant individuality. But with a few leaders to direct competently and judiciously some well-planned and expeditiously executed forays into the camps of the haughty surgeons, the snooty specialists, the public health picnickers, and the welfare weevils, anything can happen. And we hope it does. Good luck, G. P.'s and good hunting!

We had a birthday, down at French Lick, having reached the active period of sixty-five years. Dog-gone! Then, to top the thing off properly, there awaited us a letter when we got home, from the Social Security Board, advising that, having reached that age, we were entitled to a retirement, *if certain conditions were met.* As yet we haven't inquired about these, preferring to fill out the balance of the year, at least.

An innovation in road marking was noted on state highway 37 from Martinsville south. This road, commonly known as a more or less dangerous one, because of its many sharp curves, long has had the attention of the State Highway Commission. For some time past a movement has been on foot by the central Indiana press to have this road relocated, but for various reasons the Commission has been unable to include such a program in its plans. However, before reaching each curve there now appears a sign with the figures showing the rate of speed at which these curves may be taken safely. These speed figures on the road from Bedford, south, range from twenty-five to sixty miles per hour. We believe this is a very forward safety movement and trust that in time the plan may be generally adopted over the state.

Convention Notes



From the Speakers' Table (left to right): R. L. Sensenich, George Dillinger, Irvin Abell, Walter McCarty, Karl Ruddell, Frank H. Lahey, A. M. Mitchell, and A. T. McCormack.

Yep, they were here, as was to be expected—Sam and Katharine, of Shelbyville—meaning, of course, the Shelbyville Kennedys, that peripatetic couple who never miss a convention of any sort. We always look for this charming couple, about the first thing we do at a convention, and we always find 'em among the first registrants.

* * *

Bruce Lung, from up Kokomo-way, was among the early arrivals. Bruce said that Road 37 reminded him of the tortuous paths along Wild Cat Creek up in Carroll County. Thus again does Wild Cat enter our columns. Bruce lived "down the road apiece" from our ancestral estate.

* * *

Our chief investigator tells us that one woman—said she was from Lake County—was so flustrated by the kaleidoscopic changes in the entertainment program that in the transition from one raiment to another she draped herself in a new gown of light material, forgetting to divest herself of a serge skirt she had previously worn. Our informant reports that when she discovered her sartorial error she dismissed it with the remark, "Well, my legs kept warm!"

* * *

The scientific program was heavy with guest speakers who are former Indiana men: Nicholson J. Eastman, son of the late Dr. Thomas B. Eastman, of Indianapolis, and Edmund L. Keeney, son of the late Dr. Bayard G. Keeney, of Shelbyville. Norvelle C. La Mar, of New York, an Indiana University Medical School graduate, also was on the program.

* * *

Malachi and Mrs. Topping flew in from Terre Haute, flying their own plane. Such pleasure jaunts are not for those as old as us—we prefer being nearer the ground.

* * *

The annual banquet was an outstanding success, one of the most largely attended functions of that sort in the history of the Association. The selection of guest speakers was a happy one. A. M. A. President-elect Frank Lahey was in his best vein, and while he disclaimed any practical knowledge of medical economics, he proceeded to give one of the best interpretations of that subject we ever have heard.

* * *

Walter ("Mickey") McCarty, editor of the Indianapolis *News*, also reached the heights in his talk, exhibiting an amazing knowledge of medical problems, all the while interspersed with an Irish sense of humor that kept his audience alert.

* * *

The trap and skeet shoots are rapidly growing in popularity each year. Golf, as a matter of course, continues to be the chief attraction on "sports day," but the Nimrods of the profession are coming to be close contenders.

* * *

The early morning hikers, as well as the pre-luncheon and pre-dinner varieties, were slowed up by the rain on Tuesday. However, the succeeding days found many traversing the paths leading in all directions from the hotel. Nowhere else have we seen a place that so readily affords opportunity for those who love to wander at random.

* * *

Chief squirrel feeder of the convention was Nesbit, head of the medical department of the Gary schools. Each morning, noon, and evening found "O. B." wandering about the place, followed by a flock of these little fellows. One morning, soon after daylight, we looked from our seventh-floor-back-in-the-woods window and saw the gray-thatched head of this nature lover strolling along in a nonchalant manner, drinking in all the beauties of the Hoosier paradise. Nesbit eschews the custom of wearing a hat on any and all occasions, which probably accounts for the fact that, even at his advanced age, he has every hair with which he was born. His only rival in this regard is that Stinson chap from up Rochester-way.

* * *

The rain on Tuesday slowed up the registration to a marked degree, but Wednesday proved to be a delightful late-October day and the receptionists and the registration battery were on the *qui vive* from early morning until the shades of evening fell.

The entertainment arranged for the Woman's "Artillery" was planned and executed on a stupendous scale; we doubt if they ever before were so strenuously moved about from one function to another. It is probable that the Spring Mill Park trip was the outstanding feature of the entire group—all the participants toted bags of water-wheel, slow-ground corn meal as they returned to the hotel, hence, Hoosier physicians, for some weeks to come, will be dining on Johnny cake, corn meal muffins, and hasty pudding. (We'll bet a nickel to a New Deal promise that less than ten per cent of our readers know what "hasty pudding" is.) Tom Oberlin, the Lake County wag, says he is expecting to develop a case of pellagra most any day now.

* * *

Speaking of the "shades of evening" brings forth the thought that eventide at French Lick is an especial treat. To one fortunate enough to know his directions, the sunset scene at French Lick is *something*. A glorious sky, the twitters of the birds as they seek their spots for their nightly repose, the grey squirrels scampering hither and yon for a last-minute nut, all serve to make a beautiful picture.

* * *

Jon N. Kelly of La Porte, late president of the "Westville Academy of Medicine," was quite busy meeting his many acquaintances from all over Indiana and enjoying every minute of his vacation in the southern Indiana hills.

* * *

Of late, probably due to increasing age, we have done considerable fussing about the leaves which annually fall from the half-dozen trees on our home estate. After watching the activities of a large crew of men employed in removing the leaves dropping from thousands of trees on the French Lick properties, we have decided to be more content with our lot.

Just about day-break, one morning, we noted a group of lights well back on the hill at the rear of the hotel and wondered if it might be a night club of some sort. On inquiry we learned that the lights came from the hotel dairy barns, one of the many attractions about the Taggart properties.

* * *

John Hewitt dropped down from Mudlavia, renewing his many acquaintances made during his residence at Terre Haute. John, be it recalled, was a state senator years ago, rendering yeoman service to the profession. John does not seem to have acquired any appreciable degree of "age spread," maintaining his slender *svelte* figure which during his senatorial days brought forth the *oh's* and *ah's* of the feminine contingent who followed the doings of the Indiana General Assembly.

* * *

Many of our members took a pre-convention or a post-convention tour, taking full advantage of the scenic beauties of southern Indiana. Several parties stopped over at Spring Mill State Park, taking advantage of the new hostelry at that point.

* * *

Other than the chill of a late October night, which brought out a display of goose flesh seldom seen, the barbecue program for the men, on Tuesday evening, went over in a big way. Led down into a corner of the front lawn by a Scot band, kilties and all, from neighboring Bicknell, several hundred physicians marched to the barbecue site where they were regaled with generous helpings of barbecued beef, pork and lamb. About the only thing missing was a steaming portion of "Burgoo," a culinary product known only to this section of Indiana and points south. We even would have relished a bowl of another southern Indiana product, one so graphically described each season by editor Clarence P. Wolfe, of the New Harmony *Times*. Beer and coffee were served in generous quantities, the latter proving to be more popular on this occasion.

EXECUTIVE COMMITTEE



Top row: Thomas A. Hendricks, A. F. Weyerbacher, M. A. Austin, C. H. McCaskey, and Cleon A. Nafe.
Bottom row: Albert Stump, Karl R. Ruddell, George Dillinger, and A. M. Mitchell.

The hotel waiter who for so many years has afforded diversion for the guests by his ability to carry a heavily-laden tray perched atop his head, still carries on at French Lick. However, we note that he has an apprentice, a much younger chap, so it is presumed that the originator of this stunt must find his increasing years bothering him somewhat. It is, of course, possible that he is nearing the Social Security age and is planning to retire.

* * *

"Alex," he of the Council, you know, has become a full-fledged country squire. He talks fluently about his live stock, about the modern feeding methods and all that, but a little painstaking inquiry brings forth the fact that it is his son who does all the thinking, planning and, we doubt not, most of the work. Anyway, Alex is highly pleased with his country home and looks all the better for having gotten out into the fresh air.

* * *

It's a funny business! It often happens that supplemental reports, when presented to the first meeting of the House, are infinitely longer than the original reports—and the originals are plenty long!

* * *

Doggone it! After we warned the hotel folk, a few years ago, that we do not like white pepper, we found it on every table in the various dining rooms. Just why any Hoosier hostelry or home wants white pepper about, when the wide world knows that black pepper is the *sine qua non*, just flabbergasts us.

* * *

Most individuals have one or more tics, but Frank Lahey has so many we've forgotten most of 'em. However, we must say that never before have we seen anyone do so many tricks with a spectacle temple. He uses it as a means of applying a general face massage while talking. One time he is scratching an ear with this little implement, another time he is massaging his nose with it, and the next moment he is titillating the corner of his mouth, all the while using the same right spectacle temple. It's quite a diversion, watching to see what next that lad will do with his little plaything.

* * *

Some of the "boy orators" of the House were stopped in nothing flat by a fast one pulled by somebody or other. Usually, the last session is a long, drawn-out affair but on this occasion all was over a little after eight a. m., due to a special session having been called for late afternoon of the day before.

* * *

Joe Skobba, superintendent of the Muscatatuck Colony, down at Butlerville, came down to look things over and to become better acquainted with Hoosier Medicine. Joe is a most brilliant addition to the galaxy of shining domes. For a man of his years, he does exceedingly well, out shining all but the Public Relations Counsel of the Lake County Medical Society and Ferd Weyerbacher, Association treasurer. In case you do not place Joe, he is the chap who boldly invaded the inner sanctum of The Journal and carried off our Miss Toman into the blissful state of wedlock, drat him!

* * *

Two of the headquarters staff were unusually busy at the convention, gals we commonly know as Lucretia and Eloise, referring of course to Miss Kribs and to Miss Reid. The latter is in charge of the membership files at headquarters which files are taken, in toto, to every convention. So many men forget their membership cards, and it is Miss

COUNCIL MEETING



Standing: A. F. Weyerbacher, Thomas A. Hendricks, James White, O. O. Alexander, E. M. Shanklin, C. J. Clark, Norman Beatty, I. C. Barclay, W. H. Garner, C. H. McCaskey, George Dillinger, A. J. Sparks, and Alfred Ellison.

Seated: Floyd T. Romberger, C. A. Nafe, A. M. Mitchell, M. A. Austin, Ira Perry, Sam Kennedy, H. C. Wadsworth, and J. C. Elliott.

Reid who straightens 'em out and sees to it that they are properly credentialed. Miss Kribs usually is busy "taking a letter" from the Blonde Senator, a letter he promised to get out some time before, perhaps. Then, too, she has to contend with the committee chairmen, and an occasional member who happens to think of something he wants to get down in black and white. Altogether these young women are plenty busy during a convention—and at the home office. Oh, me! we'd rather be an editor!

* * *

The house photographer down at French Lick is a personable fellow, but is one of these evanescent chaps. Hither and yon he goes, "sighting" his Graflex at groups and individuals, the final result being posted on the hotel bulletin board each morning. The most interesting part of his activities is that seldom does one know he has been photographed until he notes his likeness or some one calls attention to it on the display board. We steered several members toward the board so that they might see how they looked when in full repose and, as a result, several sales were made. To date we have received no commission, though we did take the trouble to leave our home address at the desk!

* * *

As noted in an editorial in this number, the breakfast meeting of the Committee on Conservation of Vision was one of the outstanding committee sessions of the French Lick convention. When "Cy" Rutherford sets out to do things, he does 'em in a big way.

* * *

President Oliphant of the Indiana State Board of Medical Registration and Examination, in a House discussion, made it very clear that he still favors an annual registration for all who are engaged in the practice of the healing arts. He states that while it is true that the Indianapolis Better Business Bureau is doing a good job of cleaning up some deplorable conditions, the fact remains that until we have a registration law we never will be able to ferret out all irregular, unlicensed practitioners.

* * *

Bunny Hare came over from Evansville State Hospital to renew many old acquaintances. He seems to have acquired his age spread since we last saw him, but maintains that he is as fit as the proverbial fiddle. He now eschews hats of all sorts; seems as how he was "ridden," some few years ago, about an alleged new creation, one that never was able to make the style market. Bunny was telling us about a challenge presented to him by his two grown sons, not so long ago. He felt that he did not dare pass up the challenge so proceeded to prove his ability in almost any capacity. The effort, so he admits, put him *hors de combat* for many a day and he is now hoping that, come next summer, his sons will have acquired a dignity of such degree that they will issue no more challenges.

* * *

Another noticeable change in appearance is that of the Blonde Senator, alias Tommy Hendricks. For years his silken-textured locks have moved to the four winds wholly unruly and almost unkempt. Now each hair remains in place as though set by a permanent. Can it be that Tommy is now a patron of the beautician?

* * *

It may be that we never before had noticed it, but Davy Crockett barged in on convention circles wearing a pipe. At first we thought it might be a new one but later on, when "in conference" in a hotel room, we discovered that it was of ancient vintage, rivaled only by the specimen used by Harry Howard.

* * *

Came Wednesday morning and two notable convention exhibits were not yet to be seen—Ross Sensenich and his brief case. But we finally located them and all was again normal. We dare say that no one, not even the busiest of Washington New Dealers, carries a brief case so laden as that of the Sensenich boy. And we sometimes wonder if it is just padded, or if it really does contain material essential to a prolonged speech?

* * *

Alexander reports an extreme water shortage in the Terre Haute area these past two or three months. He says that in normal seasons they find plenty of water at about eighty feet from the surface, and that now they have to go down one hundred feet. "Mitch" says that the citizens have all taken to Champagne Velvet and that the brewery now operates day and night.

* * *

Weinstein says that since he came to French Lick he has been drinking from two to three gallons of water every day, the first time in months that he has had all the water he wants.

* * *

Charlie Combs had gone so long without water that he has lost all taste for it; he's just sorta dried up.

* * *

"Henry" Waterson, public relations counsel of the Lake County Medical Society, is one of the most easily located men in an assembly as large as our convention. His shining dome, front section, has but one rival in Hoosier Medicine, that of Ferd Weyerbacher.

* * *

Miss Rokke, latest addition to the staff of THE JOURNAL, assisted in the registration section, thus being afforded opportunity to meet Indiana physicians and give them the once over.

Chairman Nafe was very much perturbed on noting that he had been assigned five minutes for a report to the Council. However, he managed to even up later in the day by using an hour or two in addressing the House, using the same topic.

* * *

In some manner or another, J. Bill Wright, the Indianapolis sartorial king, usually manages to make "Convention Notes." This time Bill pulled a good one, good enough for the "Talk of the Town," in the *New Yorker*. He averred that he had just closed his summer house up at Lake James (Pokagon State Park) and that he had stopped over at French Lick *on his way home!* Bill's geographical knowledge of his native state seems somewhat out of balance!

* * *

Sitting here in the early daylight hours, among the "foothills of the Cumberlands" where all seems so tranquil, one wonders about the strife and turmoil which even now besets the world. One can not but wonder why the medical profession of Indiana which has met here to discuss our professional problems and to exchange ideas that are for the betterment of mankind (in common with our confreres all over the land) is beset with so many harassments! Right now we are at peace with the world; we fervently wish that the world might be at peace with us!

* * *

The first Hoosier physician we recognized as we entered the hotel was Dr. W. T. Lawson, for many years secretary of the Hendricks County Medical Society. Dr. Lawson admits an age of over ninety-one years but is as spry as any man two or more decades his junior. It rather set us back to see a man of his years among the early arrivals when our rheumatic bones were aching after the long trek from the hinterlands of the Dune country up in Lake county.

* * *

Another early arrival was George Daniels from up Marion-way. George was discovered marching up and down the spacious porches of the hotel as if in deep meditation. Asked as to his thoughts, he laconically replied, "I was just thinking," and when George is just thinking one may expect most anything.

* * *

Writing convention notes at the unholy hour of five-thirty a. m. is no small task. Sitting at the windows, 'way back in the woods, and trying to concentrate upon the business before us, we are distracted by many extraneous things. The birds are beginning to awaken; we hear the raucous call of the crow, the shrill penetrating "song" of the jay-bird, the twit of the tiny peewee. And from across the room comes the zoom of the morning snore from mama who has not yet been fully aroused by a generous potion of hot Pluto—just a matter of time, though! (Bulletin—it did!)

Late October is an ideal time for a meeting if it is held at French Lick. Dame Nature has finished her fall painting and the gorgeous panorama of color is spread country-wide. Never before have we seen such a riot of color in the autumnal foliage. Much to our delight, the yellows are predominant —and we do like yellow!

* * *

They have the cutest squirrels at French Lick! We've been watching two from a window in the hotel chasing one another hither and yon, at times engaging in a wrestling bout, then up this or that tree. Reminded us of the antics of our Jerry and Judy—two dogs—but Jerry has gone now.

* * *

When we headed for French Lick we thought, "At last we are to be away from the blah-blah of the political radio," a most happy thought, but such a haven was not to be found! Some enthusiast, who could not forego even a few days without hearing his favorite candidate, set up his portable outfit on the balcony and thereafter a fireside chat with "my friends" was in full action. Oh, me!

* * *

"Get-away Day," the final morning of our annual conventions, usually is one hustle and bustle, each trying to get on his way home right now! Not so at French Lick, however; folk who usually are in a great rush to start the homeward trip are in no hurry at all. Accosting several on this point, we commonly were given the reply, "No, I'm in no big hurry; I'm going to stick around for lunch, then take a little trip down through the hills." Something or other "gets into your blood" down there. Of course, we know the very air we breathe down in the hills is far superior to that which we get at home; the food is of a different sort from that to which we are accustomed. But there is something else, just what we do not know, unless it is the "atmosphere." When our meetings are held in a crowded city we are more or less herded together and shoved about. At French Lick there is plenty of space for everyone and there is that sense of restfulness that we seldom find elsewhere in Indiana. Yes, we like French Lick, and already we are looking forward to the time when we can go down there again.

* * *

"Southern Hospitality!" We often hear this expression and, on occasion, have met with it in various sections of that part of the country, even in the lower sections of Indiana. But never before have we seen such a generous portion as was dealt out to the host of Hoosier physicians and their ladies at French Lick. Tom Taggart made the rounds each day to see that every department was functioning; the hotel manager and the convention manager were on the job at all times, as well as was every employee, from the front office down. Their attitudes conveyed the information that they were glad to see us and that it was their job to take care of us. We always have liked French Lick, but this recent visit completed the "sale."

President's Page

In the closing days of the year we find world affairs in the most terrible condition in the history of civilization. Czechoslovakia, Norway, Finland, Denmark, Holland, Belgium and France have been conquered and are existing under a Dictator-enforced peace, a peace of slave and master. The same kind of peace is proposed by the Axis partners for the entire world. Total war, a war in which the women, the children, the aged, and the infirm are its direct victims, is the vehicle for the accomplishment of such a peace. The existence of a single democracy would be inimical to such a program; the democracies of the Western Hemisphere can hardly expect to escape should the Axis be successful elsewhere.

We should be thankful that there is some time left to prepare for hemisphere defense and that our own country undividedly is calling on all its vast resources and bending every effort to make its defense so formidable as to discourage attack by any combination of powers whatever.

The medical profession of America through the American Medical Association has shown its desire to cooperate to the fullest extent in the defense program.

It is due to the strenuous efforts of the M-Day Committee and the willingness of the physicians themselves to cooperate that Indiana is in the vanguard of the states in medical preparation for defense. Every effort is being made to prevent dislocation of medical service to the civilian population. It is to be hoped that no community will be deprived of adequate medical service and no hospital crippled by undue depletion of its personnel.

While there seems to be no feasible plan to protect the practices of those drafted into the service, it should be the unselfish duty of all of us to make every effort to see that their interests are not jeopardized by their enforced absence.

Aside from the effect of war and rumors of war, the medical profession in Indiana finds itself in a very favorable position. There has been no adverse national legislation and the President, in an address delivered at Bethesda, Maryland, on November 1, made a very positive statement against the socialization of medicine. However, there are many powerful groups clamoring for some form of national health legislation, and it behooves the entire profession to be on the alert so that we may at least have a voice in such legislation. Here, again, a good defense would seem to me to be an active program to solve the medical economic problems by our own profession. I would suggest that our legislative committee try to procure legislation permitting non-profit hospital and health service insurance, properly safeguarded, and that our permanent study committee be given a budget to study existing and contemplated health plans to the end that the profession might have a greater latitude of action.

I am of the opinion that, under the present law in Indiana, compensation cases have no freedom of choice of physician; that violates all our principles and should be changed.

The Committee on Medical Care for the indigent deserves great credit for the creation of a better understanding between the overseers of the poor and the profession and should be encouraged to proceed along the course they have charted.

I want sincerely to thank the members of all the committees for the splendid work they have done, and the members of the staff of the Association office and Journal for the efficiency with which they have conducted our affairs.

In conclusion, I want to express my gratitude for the fine cooperation of the entire profession. It has been a most pleasant year.

Karl R. Ruckell

HIGH-LIGHT ACTIONS OF THE HOUSE OF DELEGATES AND COUNCIL AT FRENCH LICK SESSION

Many, important, and involved, to the average reader, are the actions taken by the Council and the House of Delegates at the annual session, and this summary has been prepared so that each physician in the state may know what recommendations were made at the French Lick session. In order to have a full understanding of the problems discussed by the Council and the House of Delegates the detailed minutes (beginning on page 704) of these meetings should be read; this outline merely attempts to highlight some of those matters which received the most attention.

Changes in Constitution and By-Laws Adopted by House of Delegates:

(1) *Members of House of Delegates* made eligible to hold office of the association. (Heretofore it was necessary for a member of the House of Delegates to resign before his name was presented as president.)

(2) *Word "material"* taken from phrase that among the functions of the society should be "to guard and foster the material interests of its members."

(3) *Delegates of Joint Societies* — Each of the counties composing a joint medical society may have its own delegate. Before this change in the by-laws, joint societies had only one delegate to represent both counties. This provision, it was felt, was keeping several societies from forming joint organizations where such a move is desirable.

(4) *Proposal to change age* at which a member would be eligible to honorary membership from 75 to 65 years was rejected.

Military Preparedness—This was perhaps the most important subject discussed at the meeting. Its various phases were thoroughly treated by many of the speakers—Colonel Hitchcock, Doctors Rankin, Peterson, Abell, Bird and Ruddell. Only two official actions however were taken by the House of Delegates upon this subject:

1. Resolution presented by the Marion county delegation advocating a plan whereby the absentee physicians who go into service should receive compensation from physicians who remain at home and care for the absentee physicians' patients. The House of Delegates felt that this was a matter to be handled locally by each county medical society as it thought best.

2. The state membership dues of all men are to be waived while they are in active military service.

Industrial Health becomes a very important subject in connection with the medical preparedness and the national defense program, and as a result received much attention. Dr. Carl M. Peterson, secretary of the Council on Industrial Health of the A. M. A., talked upon the importance of this subject at the military preparedness luncheon. Among the recommendations of the committee the following two points received special attention by the House:

1. One or two physicians should be appointed on the industrial board.

2. Liaison committee should be appointed by the National Association of Manufacturers to work with the medical profession.

The Industrial Relations Committee of the Lake County Medical Society submitted a protest to the committee report which was filed with the report and is printed in full in the minutes of the third meeting of the House of Delegates. The theme of this protest is that control in regard to industrial health practices should not be vested in the Indiana State Medical Association but rightly comes within the jurisdiction of the local county medical society. The protest reads:

> "Local problems should be for local consideration and disposition, and there is no emergency existent that can not be handled locally, or at best through cooperative assistance from the state body, without setting up a policy of absolute state control or dictation."

The reference committee refused to sustain these objections and recommended the adoption of the original report of the special committee and this recommendation was approved by the delegates.

A special issue of THE JOURNAL devoted to the subject of Industrial Health will be issued shortly after the first of the year.

Courses in industrial medicine in the medical school curriculum were recommended.

Medical Relief—Many problems, such as the care of the indigent sick, were discussed in the report made by Dr. J. S. Leffel, of Connersville, committee chairman, which was approved by the House of Delegates. Among the points concerning this complex problem touched on in the report were the following:

1. Medical and hospital care is now the largest single item of poor relief except food.

2. Age old patient-physician relationship is disturbed.

3. Recommendations of the committee:

Medical societies should cooperate with trustees and other lay groups for better treatment of indigents.

Discussion of fees should be left with local societies.

Local physicians should acquaint themselves with problems of local taxation.

In accordance with principles of the A. M. A., the profession should accept obligation of caring for all the people.

Medical and Hospital Service Plans. House of Delegates recommended that the Council and other interested committees of the Indiana State Medical Association act with the Indiana Hospital Association and the Governor's special committee in formulating any hospitalization or medical care program. The House "specifically reindorsed the principle of cash indemnity medical insurance" and recommended that medical service plans be encouraged on an experimental basis in those localities where the sentiment of the profession and the public warrants it. The House authorized the Council to take such action as may be deemed advisable to advance these purposes and initiate such legislation as may be needed.

Dr. Ruddell, in his presidential address, recommended that "legislation, properly safeguarded, making possible plans for both non-profit group hospitalization and group medical care, be introduced in the next legislature."

University Hospital Commitment Law—In connection with the measure passed at the last session of the legislature, the House recommended "That every indigent case sent to any hospital should be certified by the judge having jurisdiction upon recommendation of the family physician and one other physician appointed by the judge, making two physicians; the hospital to be chosen by the judge. The payment for such hospitalization to be made by the county from which the patient is committed."

Beauty Culture Law to be changed so that beauticians may have the right to select their own physicians to make their examinations and not be forced to go to a specific doctor named by the Beauty Culture Board. Introduced by Lake County Medical Society and adopted unanimously by House of Delegates. The House adopted the reference committee's report which read in part as follows: "The Indiana State Medical Association deplores the passage of legislation under the guise of public health measures when in fact such legislation is for a purpose foreign to public health. Furthermore, whenever a law requires an examination of individuals, the Indiana State Medical Association insists that such examination shall be made in the traditional democratic manner which this association has always stood for, namely, the right of the individual to choose his own physician."

No approval to special groups. House sets up principle that the Indiana State Medical Association "should not officially approve any organization of physicians for any purpose other than its county and district medical societies and the American Medical Association."

Aid to Needy Physicians. House recommends study be made of the problem of aid to needy members of the profession in Indiana and report made at 1941 session.

Citizenship a Requirement. The House recommended that "Those various persons who are responsible for the employment of physicians and nurses for public work determine that physicians and nurses so employed be required to have a license to practice their profession in Indiana and that each be required to be a citizen of the U. S. A."

Construction of New Hospitals by Federal Government. Advocated the use of Federal funds for "equipment or extension of facilities where need is certified by local hospital authorities and the local taxing unit" and stood against use of federal funds for construction of new hospitals.

Committee on Physical Therapy is to be continued another year.

High School Athletics. Adopts report of the committee which approves in general the present program of the Indiana High School Athletic Association.

JOURNAL. Council reelected Dr. E. M. Shanklin editor and named Dr. Herman Baker and Dr. Lall G. Montgomery to the Editorial Board.

New Council Chairman. Dr. Floyd T. Romberger of Lafayette was selected chairman of the Council to fill the unexpired term (until midwinter meeting of Council) of Dr. M. A. Austin, who resigned previous to his selection as president-elect.

Future Meetings. January 12, 1941—midwinter meeting of Council. Place to be determined by Executive Committee.

January 19, 1941—Annual Secretaries' Conference, Indianapolis Athletic Club.

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1941—100%!
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HEALTH OFFICERS' CONFERENCE

With a total of 144 registrations, the 1940 annual health officers' conference at French Lick, October 28 and 29, was described as one of the most successful ever held.

Presiding officers were John W. Ferree, secretary of the Indiana State Board of Health, and Dr. J. C. Glackman, of Rockport, member of the board.

One of the highlights of the conference was a discussion of control of communicable diseases, which followed an address by Dr. E. K. Musson, chief of the Chicago communicable disease control department. Among discussions was a paper on "Obstetrics, New and Old," by Dr. Hugh A. Cowing, president of the Muncie city board of health. Dr. George W. Bowman, chief of the health board's Bureau of Venereal Diseases, discussed the present status of the five-day syphilis control treatment, and Dr. Oliver W. Greer, director of the division of crippled children of the State Department of Public Welfare, reviewed the infantile paralysis situation in Indiana and detailed the services of the state board of health in handling the situation. Opening remarks were made by Dr. Karl R. Ruddell, of Indianapolis.

DR. BROTHER NAMED HEAD OF BUREAU OF LOCAL HEALTH ADMINISTRATION

Dr. John W. Ferree, secretary of the Indiana State Board of Health, has announced the appointment of Dr. George M. Brother as chief of the Board's Bureau of Local Health Administration. Dr. Brother, who is a native of Rockport, takes over the post which was vacated by Dr. Ferree when the latter was appointed health board secretary by Governor M. Clifford Townsend. For the past four years Dr. Brother has been in charge of the State Board's District No. 4 and was stationed at Rising Sun. However, he was on leave of absence for a nine-month period during which he completed work on his master's degree in public health administration at Johns Hopkins University.

TULAREMIA SEASON

The fall hunting season has opened and with it opens the tularemia season for Indiana physicians. Records at the Indiana State Board of Health show that the 1940 number of reported cases of the disease was 40 at the end of August. The record of the fall and winter hunting season is yet to be made. In 1937 there were 33 reported cases; in 1938, there were 134 cases, and in 1939, there were 78 cases.

MEETING OF REGISTRATION BOARD

The annual meeting of the Indiana State Board of Medical Registration and Examination will be held on January 14, 1941. At that time officers for 1941 will be elected. Dr. J. T. Oliphant, of Farmersburg, is now president of the board. The board, under laws governing it, is authorized to adopt new rules and regulations only at the annual meeting.

Hearing on two citations against doctors to show cause why their licenses should not be revoked will be conducted at the January meeting.

HEALTH PROBLEMS AND NATIONAL DEFENSE

A preliminary survey of health problems in connection with the national defense program has been completed by the Indiana State Board of Health, Dr. John W. Ferree, board secretary, has reported.

Although such a survey was asked by the Federal public health department, Indiana had already started its survey when the request came from Washington. The Indiana survey was conducted through cooperation of the state coordinator, Col. Robinson Hitchcock, and Federal public health department.

Results of the survey can not be made public, Dr. Ferree said. However, it was concerned with environmental sanitation, with medical care of workers in the defense industries of the state, and with general public health facilities.

ABSTRACT

STOMACH CANCER SHOULD BE CLASSIFIED

A better classification of the different forms of stomach cancer according to their probable response to surgical treatment would make it possible to save many persons in whom the outcome is hopeful and thus would reduce the toll from this disease, which is responsible for approximately 4 per cent of all adult deaths, Rudolf Schindler, M.D., Chicago, suggests in *The Journal of the American Medical Association* for Nov. 16.

If it could be established that some forms have on the average a good chance of recovery while in others the chances are slight, he says, the decision to operate could be placed on a more reliable basis.

Early diagnosis by means of x-ray and visual examination with the gastroscope is the only possible way to discover cases of stomach cancer while they are still curable. Such examinations should be carried out in all patients who suffer from minor abdominal distress, slight lack of appetite and some loss of weight.

Cancer of the stomach is not a disease of old age, although it occurs especially after the thirty-fifth year.

Membership Roster

INDIANA STATE MEDICAL ASSOCIATION—1939

Following is a list of members of the Indiana State Medical Association including the names of all those who were members on November 25, 1940. Membership established after that date could not be included in this issue of THE JOURNAL.

Members who reside in one county and hold membership elsewhere are listed under the counties in which they reside. Names of members who have died during the year do not appear on this list.

The letter (H) following a name indicates that the physician is an honorary member of his local society and of the Indiana State Medical Association.

If any errors are found in this list, please report them to THE JOURNAL, 1021 Hume Mansur Building, Indianapolis. The cooperation of members is urgently requested.

ADAMS COUNTY

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Ernest Franz (H)
Myron Habegger
D. D. Jones
H. O. Jones
Amos Reusser

Decatur

S. D. Beavers (H)
Palmer Eicher
R. E. Daniels
Ben Duke
F. L. Grandstaff
G. J. Kohne
C. C. Rayl
W. E. Smith
Harold F. Zwick

Geneva

C. P. Hinchman
C. R. Price

ALLEN COUNTY

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Arthur J. Roser

Fort Wayne

J. R. Adams
Harry Aldrich
Paul P. Bailey
P. W. Bailey
Jos. H. Baltes
A. C. Bartholomew
Karl Beierlein
D. R. Benninghoff
Raymond Berghoff
J. E. Bickel
H. V. Blosser
Theo. R. Borders
C. C. Bosselmann
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J. W. Bowers
Robt. H. W. Brosius
H. O. Bruggeman
Doster Buckner
E. L. Bulson
H. B. Bundrant
Elizabeth Burns
Jessie C. Calvin
D. F. Cameron
W. W. Carey
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M. B. Catlett
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H. R. Chester
W. R. Clark
John E. Conley
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Beaumont S. Cornell
C. R. Dancer
I. W. Ditton
M. H. Draper
A. H. Duemling
W. W. Duemling
K. C. Eberly
B. M. Edlavitch
L. W. Elston
Ralph W. Elston
W. F. Englebert
C. H. English (H)
A.N. Ferguson
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H. W. Foy
H. W. Garton
W. F. Gessler
N. H. Gladstone
H. E. Glock
Maurice E. Glock
Wayne R. Glock
L. K. Gould
Allen Hamilton
R. L. Hane
K. C. Hardesty
Morse Harrod
L. P. Harshman
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A. P. Hattendorf
Jay F. Havice
J. J. Hayes
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S. P .Hoffmann
R. E. Holsinger
Don D. Johnston
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O. T. Kidder
J. H. Kilmer
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W. E. Kruse
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J. C. Lill
Maurice Lohman
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T. E. McCabe
G. A. McDowell
D. H. McKeeman
L. S. McKeeman
Edgar Mendenhall
Samuel R. Mercer
Herman A. Meyer
S. C. Michaelis
Carl G. Miller
Mahlon F. Miller
O. J. Miller
Richard Miller
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G. F. Moats
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L. W. Mueller
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Elmer W. Nahrwold
Carroll O'Rourke
J. H. Oyer
C. B. Parker
Kermit Perrin
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M. F. Porter
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Henry Ranke
Lyman T. Rawles
H. A. Ray
B. W. Rhamy
W. B. Rice
Walter J. Rissing
Noah A. Rockey
Juan Rodriguez
D. L. Rossiter
Maurice Rothberg
C. J. Rothschild
Harry W. Salon
N. L. Salon
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A. R. Savage
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E. M. Schellhouse
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Ed. H. Schlegel
H. V. Scott
David I. Schwartz
Herbert Senseny
Lawrence Shinabery
John Short
E. C. Singer
G. H. Somers
L. E. Somers
A. J. Sparks
Paul L. Stier
A. E. Stoler
John Swanson
R. W. Terrill
J. W. Thimlar
Walter Thornton
Philip S. Titus
E. M. Van Buskirk
Walter H. Vance
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J. C. Wallace
S. G. Welty
Kathryn Whitten
Robt. W. Wilkins
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Noah Zehr
E. S. Zweig

Monroeville

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H. E. Steinman

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Berneice M. Williams

Woodburn

D. C. Emenhiser
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Earl Park

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J. W. Strange

Odon
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Jerome DeMotte

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Nila Covalt
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J. Frank Downing
F. W. Dunn
L. C. Garling
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Howard E. Hill
Robert Hill
Anson Hurley
A. T. Kemper
Chas. B. Kern
F. E. Kirshman
Jules La Duron
C. A. Leatherman
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B. W. Stocking
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Wm. W. Wadsworth (H)
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Amelia T. Wood
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A. F. Gugsell

Holland
H. H. Marks

Huntingburg
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H. C. Knapp
E. G. Lukemeyer (H)
L. C. Lukemeyer
S. L. McKinney
E. F. Steinkamp
Harvey Stork
F. P. Williams

Ireland
L. B. Johnson (H)

Jasper
Paul J. Blessinger
J. F. Casper
John P. Casper
M. C. Heck
Geo. A. Held
St. John Lukemeyer
Leo A. Salb

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G. E. Bowdoin
R. A. Bowman
Walter A. Compton
L. M. Dedario
Fred N. Dewey (H)
L. A. Elliott
C. F. Fleming
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Justus M. Fleming
Geo. W. Grossnickle
A. W. Hull
M. F. Hunn
Arthur W. Kistner
John W. Kistner
Elmer G. Koehler
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H. N. McKee
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H. M. Pickard
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R. B. Stout
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L. F. Swihart
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Goshen
H. Clair Amstutz
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Middlebury
M. A. Farver
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Melvin Teters

Millersburg
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Nappanee
Henry Defrees (H)
R. A. Fleetwood
Douglas Price
Melvin Delbert Price
W. A. Price
J. S. Slabaugh
Lotus M. Slabaugh

New Paris
E. D. Stuckman

Wakarusa
Chas. L. Amick
F. I. Eicher

FAYETTE-FRANKLIN COUNTIES

Brookville
W. A. Foreman
E. M. Glaser
R. E. Glaser
H. N. Smith

Connersville
L. N. Ashworth
Irvin E. Booher
R. H. Elliott
Stanley Gordin
Stanton E. Gordin
Albert F. Gregg
W. A. Kemp
J. S. Leffel
George N. Love
H. C. Metcalf
R. D. Morrow
Francis Mountain
H. W. Smelser

Oldenburg
Geo. Obery

FLOYD COUNTY

Galena
E. L. Sigmon

Georgetown
H. K. Engleman

New Albany
A. M. Baker
James W. Baxter
J. W. Baxter, Jr.
S. M. Baxter
C. E. Briscoe
K. H. Brown
D. F. Davis
Parvin Davis
Geo. H. Day
W. F. Edwards
W. H. Garner
John P. Gentile
John F. Habermel
W. A. Hall
A. P. Hauss
Thomas Hewlett
A. G. Hofferkamp
Chas. P. Leuthart
J. V. Pace
P. R. Pierson
Gretchen I. Polhemus
A. N. Robertson
S. T. Rogers
P. H. Schoen
H. B. Shacklett
M. B. Strange
F. T. Tyler
Harry Voyles
Wm. W. Weaver
W. C. Winstandley
M. F. Wolfe

FOUNTAIN-WARREN COUNTIES

Attica
J. Roy Burlington
James C. Freed
Albert C. Holley
A. R. Kerr
Lee J. Marris
Margaret T. Owen

Covington
J. W. Aldridge
Earl E. Johnson
Simeon Lambright (H)
Alva Spinning
L. R. Stephens

Hillsboro
E. G. Bounell

Kingman
A. L. Ratcliff
B. J. Smith

Kramer
Clara S. Eirley
John H. Hewitt

Pine Village
Geo. W. Dewey

Veedersburg
C. B. McCord
Jno. B. Owens

Wallace
Hubert M. Rusk

Williamsport
John S. Hash
G. S. Porter

FULTON COUNTY

Akron
C. L. Herrick
Virgil Miller

Athens
A. E. Stinson

Fulton
F. C. Dielman

Kewanna
L. E. Kelsey
Kenneth Kraning

Rochester
E. V. Herendeen
M. C. King
M. E. Leckrone
H. W. Markley
Mark M. Piper
C. L. Richardson
Dean K. Stinson

GIBSON COUNTY

Fort Branch
B. C. Gwaltney
R. J. Miller
W. F. Morris

Haubstadt
Austin F. Marchand
Edwin V. Marchand
Harold G. Petitjean

Hazelton
H. M. Arthur

Oakland City
C. M. Clark
John W. McGowan (H)
E. R. Ropp
A. B. Scales
R. W. Wood

Owensville
G. B. Beresford (H)
J. R. Montgomery
Darwin M. Short
Karl S. Strickland

Patoka
M. L. Arthur

Princeton
H. H. Alexander
O. T. Brazelton
W. E. Childs
Orville M. Graves
M. P. Hollingsworth (H)
Virgil McCarty
R. S. McElroy
Chas. A. Miller
J. L. Morris
A. H. Rhodes
W. B. Wood
A. L. Ziliak

GRANT COUNTY

Fairmount
Ralph H. Beams
Z. T. Hawkins
Glenn Henley
L. D. Holliday

Gas City
Leon J. Garrison
Fred Tavenner

Jonesboro
Russell Baskett

Marion
Charles F. Abell
W. T. Bailey
Asa W. Bloom
Grace B. Boyer
Robert F. Braunlin
W. H. Braunlin
Robert McD. Brown
V. V. Cameron
B. C. Dale
E. O. Daniels
G. R. Daniels
A. T. Davis
M. S. Davis
G. G. Eckhart
L. H. Eshleman
Henry Fisher
Pierre J. Fisher
Max Ganz
H. R. Goldthwaite
A. D. Huff
R. W. Lavengood
M. J. Lewis
Harold E. List
Eleanor McIlwain
Robert McIlwain
J. D. McKay
H. A. Miller
Nettie B. Powell
F. J. Price
Sidney Price
L. L. Renbarger
G. G. Richardson
J. A. Richey
W. Y. Seymour
J. H. Stewart
Samuel Weinberg

Swayzee
P. C. King
Wm. S. Resoner

Upland
E. C. Taylor

Van Buren
John E. Derbyshire

GREENE COUNTY

Bloomfield
King L. Hull
Mathias S. Mount
H. B. Turner
F. A. VanSandt

Jasonville
Carl M. Porter
H. G. Rotman
Sam Rotman

Linton
Edwin B. Bailey
P. C. Berns
W. F. Craft
C. C. Hamilton
Geo. C. Porter
B. B. Raney
Milton E. Tomak
John W. Woner

Lyons
Paul A. Jones
J. S. Simons (H)

Newberry
M. Luther Hamilton

Worthington
J. W. Clifford (H)
A. H. Fender
George E. Moses

HAMILTON COUNTY

Arcadia
J. C. Ambrose
Frank Rodenbeck

Carmel
Ross A. Cooper
C. M. Donahue

Cicero
E. D. Havens
Russell E. Havens
C. H. Tomlinson

Noblesville
W. E. Catterson (H)
R. F. Harris
H. D. Hill
Sam W. Hooke
O. B. Pettijohn (H)
Ray W. Shanks
J. D. Sturdevant

Sheridan
I. W. Davenport (H)
J. W. Griffith
A. C. Newby
J. L. Reck
E. M. Young

Westfield
Andrew F. Connoy

HANCOCK COUNTY

Fortville
Jesse E. Ferrell
Samuel W. Hervey
Hugh K. Navin
Walter F. Ramage

Greenfield
J. L. Allen
Ralph N. Arnold
C. H. Bruner
Chas. Milo Gibbs
Oscar Heller
R. E. Kinneman
L. B. Rariden
James R. Woods

New Palestine
W. H. Larrabee
E. E. Mace
Thomas A. Pierson

Wilkinson
E. R. Gibbs
Charles Titus

HARRISON COUNTY

Corydon
W. E. Amy
F. M. Applegate
Carl E. Dillman
Edgar W. Murphy

Crandell
G. D. Baker

Elizabeth
Fred Bierly

Mauckport
Alfred Mathys

Ramsey
L. F. Glenn

Palmyra, Ind.
Frank May

HENDRICKS COUNTY

Brownsburg
Lloyd E. Foltz
A. N. Scudder

Clayton
Rilus E. Jones

Coatesville
M. E. Clark

Danville
Naomi Dalton
Mount E. Frantz
Joseph W. Gibbs
J. H. Grimes
W. T. Lawson (H)

North Salem
E. Ray Royer
O. H. Wiseheart
Robert Wiseheart

Pittsboro
O. T. Scamahorn

Plainfield
Milo M. Aiken
Jos. S. Smith
J. C. Stafford
C. B. Thomas

HENRY COUNTY

Blountsville
Paul Marsh

Knightstown
J. Leo Bartle
E. B. Call
Ralph W. Dreyer
O. H. Rees
John Ivan Waller

Lewisville
Marion R. Scheetz

Middletown
R. D. Arford
Farrol Dragoo
Joseph H. Stamper

Mooreland
W. A. DeFoe

Mt. Summit
L. C. Marshall

Newcastle
R. L. Amos
C. C. Bitler
James G. Bledsoe
Arthur B. Burnett
C. E. Canaday
E. S. Ferris
B. L. Harrison
W. C. Heilman
G. E. Iterman
W. U. Kennedy
H. H. Koons
Homer Life
J. S. McElroy
J. H. McNeill
Robert A. Smith
Walter M. Stout
C. E. Thorne
J. A. Tully
Walter C. Van Nuys
E. K. Westhafer
D. S. Wiggins
George Wiggins
W. W. Wright

Shirley
Ralph Wilson

Spiceland
W. S. Robertson

HOWARD COUNTY

Greentown
H. B. Shoup

Kokomo
C. J. Adams
Copeland Bowers
T. J. Bruegge
Elton R. Clarke
T. M. Conley
R. A. Craig
F. S. Cuthbert
M. P. Cuthbert
G. N. Druley
P. W. Ferry
W. W. Gipe
R. P. Good
W. H. Harrison (H)
W. H. Hutto
John Kimmich
L. R. Knepple
E. F. Kratzer
B. D. Lung
R. E. McIndoo
Wilbur J. Marshall
Will J. Martin
J. A. Meiner
D. A. Morrison
W. R. Morrison
F. N. Murray
F. M. Olmstead
Durward W. Paris
John P. Pennell
L. M. Reagan
H. M. Rhorer
R. J. Rhorer
R. P. Schuler
R. F. Scott
E. M. Shenk
Jesse S. Spangler
Fred M. Wilson

Russiaville
R. M. Evans
A. H. Miller

HUNTINGTON COUNTY

Andrews
S. S. Fryburger

Bippus
A. R. Episcopo

Huntington
Harold S. Brubaker
Stanley M. Casey
A. C. Chenoweth
M. G. Erehart
J. B. Eviston
Reuben F. Frost (H)
R. S. Galbreath
Paul M. Gray
F. W. Grayston
Wallace S. Grayston
James M. Hicks
R. G. Johnston
Robert Meiser
F. B. Mitman
Grover Nie
G. G. Wimmer

Markle
Halden C. Woods

Roanoke
O. P. Bigelow

Warren
Claude S. Black
L. W. Smith

JACKSON COUNTY

Brownstown
G. R. Gillespie
D. J. Cummings

Cortland
J. M. Jenkins

Crothersville
Wm. K. Adair
Frank B. Bard
P. A. Kendall

Freetown
T. E. Conner

Medora
Neal Matlock
Jack E. Shields

Seymour
W. Durbin Day
L. W. Elsner
C. E. Gillespie
Harold P. Graessle
G. H. Kamman
Guy Martin
Harold E. Miller
Louis Osterman
D. L. Perrin
W. H. Shortridge
E. D. Wright

JASPER-NEWTON COUNTIES

Brook
W. G. Pippenger

Goodland
J. F. Openshaw
Ralph H. Ruhmkorff

Kentland
O. E. Glick
W. C. Mathews
G. H. VanKirk
Roscoe Yegerlehner

Morocco
G. D. Larrison
F. L. Morehouse
L. H. Recher

Remington
Frank G. Sink

Rensselaer
H. E. English
M. D. Gwin
C. E. Johnson
A. R. Kresler
E. N. Loy
I. M. Washburn
R. N. Washburn

JAY COUNTY

Dunkirk
E. C. Garber
E. H. Hall
N. L. Heller
Don P. Murray

Pennville
H. J. Hiestand

Portland
A. C. Badders
George Cring
Forrest Keeling
O. L. Meyer
Mark M. Moran
J. E. Nixon
W. D. Schwartz
D. E. Spahr
B. M. Taylor

Redkey
John Lansford

Salamonia
J. J. Kidder

JEFFERSON COUNTY

Hanover
Carl Henning

Madison
L. F. Beetem
A. G. W. Childs
E. C. Cook
Chas. W. Denny
Anna Goss
N. A. Kremer
George A. May
W. A. Shuck
E. C. Totten
Oscar A. Turner
S. A. Whitsitt

North Madison
Morris Binder
C. C. Copeland (H)
G. A. Estel
Guy W. Hamilton
James W. Milligan (H)
Francis Prenatt

JENNINGS COUNTY

Butlerville
R. B. Johnson
Joseph S. Skobba

Deputy
D. W. Robertson (H)

North Vernon
John H. Green
W. L. Grossman
L. E. Hoeck
D. W. Matthews
D. L. McAuliffe (H)
W. H. Stemm (H)
B. W. Thayer

Scipio
W. L. Wilson (H)

JOHNSON COUNTY

Edinburg
J. V. Baker
Lon C. Bice
J. Porter Myers
Wm. E. Sutton

Franklin
Florence Blackford
Harry Murphy
Walter L. Porteus
O. A. Province
A. W. Records
R. C. Wilson

Greenwood
J. A. Craig
Kenneth I. Sheek
George Tiley
C. E. Woodcock

Trafalgar
F. P. Albertson

Whiteland
J. H. Machledt

KNOX COUNTY

Bicknell
Maurice S. Fox
R. H. Fox
E. H. Tade
John Warren
Guy Wilson

Decker
Loren Hoover

Edwardsport
J. L. Reeve (H)
J. A. Scudder

Monroe City
Milton Omstead

Sandborn
E. N. Johnson
J. W. Pahmier

Vincennes
R. M. Anderson
P. B. Arbogast
W. A. Bailey
E. W. Beckes
N. E. Beckes
G. W. Boner
C. L. Boyd
S. L. Carson
R. B. Cochran
M. L. Curtner
E. T. Edwards
V. A. Funk
L. L. Gilmore
M. H. C. Johnson
A. B. Knapp (H)
H. D. McCormick
R. C. Meyer
R. G. Moore
E. L. Pollock
S. A. Prather
J. P. Ramsay (H)
D. H. Richards
Helen M. Richards
William Schulze
K. L. Shaffer
E. F. Small

Wheatland
V. R. Lazo

KOSCIUSKO COUNTY

Claypool
H. F. Steele

Leesburg
C. E. Thomas
Everett W. Thomas

Mentone
T. J. Clutter
Dan L. Urschel

North Webster
L. A. Laird

Pierceton
G. N. Herring

Silver Lake
John L. Hillery

Syracuse
Fred O. Clark
C. R. Hoy

Warsaw
J. R. Baum
C. C. Dubois
Max D. Garber
Geo. L. Kress
A. C. McDonald (H)
S. C. Murphy
O. H. Richer
Geo. H. Schlemmer

LAGRANGE COUNTY

Howe
A. A. Wade
F. C. Wade

LaGrange
H. F. Flannigan
W. K. Nance
C. H. Schulz

Topeka
W. O. Hildebrand

Wolcottville
C. H. Kercheval
B. H. Pulskamp

LAKE COUNTY

Calumet City (Ill.)
M. R. Bascomb

Crown Point
Philip H. Becker
J. P. Birdzell
D. E. Gray
W. F. Houk
J. W. Iddings
C. R. Pettibone
Gilbert F. Schneider
Anna G. Seyler
W. H. Troutwine
William D. Weis

East Chicago
G. F. Bicknell
Chas. S. Boyd
F. F. Boys
Arthur D. Brody
R. H. Callahan
Beni. B. Cohen
A. V. Cole
E. R. Cotter
Thos. F. Cotter
A. J. Dainko
Chas. J. Doneghy
H. C. Ernst
J. C. Fleischer
Wm. G. Grosso
R. C. Hamilton
R. S. Hardwick
Wilbur Irish
D. R. Johns
Lazar Josif
Adolph G. Kammer
J. E. Komoroske
G. G. Lapid
Eli Levin
R. J. Liehr
H. L. Maier
Ora L. Marks
D. F. McGuire
F. H. Mervis
I. S. Niblick
Jas. J. O'Connor
L. J. Ostrowski
Arthur C. Payne
S. J. Petronella
F. E. Premuda
A. G. Schlieker
Frank R. Sendra
Louis Daniel Smith
Paul B. Smith
J. A. Teegarden
Hugh A. Vore
S. G. Zallen
J. M. Zivich

Gary
W. P. Alexander (H)
C. O. Almquist
George D. Anthoulis
Bellfield Atcheson
H. M. Baitinger
W. M. Behn
C. H. Bendler
S. R. Best
L. F. Bills
R. N. Bills
S. R. Blackwell
Carl Boardman
Samuel Brady
C. C. Brink
David B. Brown
M. J. Bullard
J. B. Burcham
J. A. Carbone
R. F. Carmody
J. J. Chevigny
G. E. Comstock
J. A. Craig
S. H. Crossland
J. B. Cushman
L. J. Danieleski
C. A. DeLong
A. J. Dian
J. C. Donchess
J. R. Doty
J. S. Duncan
R. A. Elliott
H. M. English
E. C. Gaebe
G. W. Gannon
Richard Gannon
E. E. Geisel
Antonio Giorgi (H)
Adolph Goldstone
Joseph Goldstone
A. F. Gregoline
B. F. Gumbiner
F. A. Gutierrez
C. M. Harless
A. T. Harris
B. W. Harris
R. M. Hedrick
M. Herschleder
Harry L. Kahan
A. M. Kan
N. E. Keseric
F. J. Kendrick
H. F. Kobrak
Meyer W. Kobrin
Geo. J. Kolettis
Julia G. Kuzmitz
Arnold L. Lieberman
T. B. Lorenty
Georgianna Lutz
M. C. Marcus
J. W. Mather
F. J. McMichael
Frank W. Merritt
O. B. Nesbit
H. C. Parker
J. O. Puryear
J. S. Reynolds
P. J. Rosenbloom
Milton R. Rubin
H. J. Ryan
L. K. Ryan
Jacob Sagel
J. J. Sala
E. L. Schaible
T. J. Senese
Michael Shellhouse
J. M. Siekierski
E. D. Skeen
Joseph Sponder
Harry R. Stimson
C. M. Stoycoff
D. B. Templin
G. L. Verplank
James P. Vye
A. A. Watts
R. O. Wharton
J. M. White
W. J. White
O. C. Wicks
Robt. N. Wimmer
C. W. Yarrington
P. S. Yocum
G. M. Young

Griffith
F. A. Malmstone

Hammond
D. A. Bethea
W. M. Bigger
J. T. Bolin
Fred Braginton
J. F. Carlo
J. F. Clancy
G. M. Cook
C. H. Crews
Alice H. Davis
H. W. Detrick
E. L. Eggers
H. W. Eggers
Ray Elledge
J. L. Emenhiser
N. K. Forster
F. H. Fox
M. B. Gevirtz
H. C. Groman
E. C. Hack
A. H. Hansen
H. S. Hicks
Andrew Hofmann
W. A. Hornaday
W. H. Howard
Robert Husted
E. S. Jones
R. W. Kretsch
Hedwig S. Kuhn
Hugh A. Kuhn
D. H. Lawler
C. A. McVey
Chas. B. Matthews
R. J. Modjeski
J. B. Morris
Lindsay Morrison
Richard B. Nelson
W. E. Nichols
Louis Nodinger
T. W. Oberlin
R. O. Ostrowski
Solomon V. Panares
E. A. Pekarek
C. W. Rauschenbach
A. C. Remich
Donald Rendel
A. W. Rhind
Perry Q. Row
F. G. Rudolph
J. Schlesinger
E. M. Shanklin
H. I. Shulruff
Stanley Skrentny
David H. Stern
S. L. Stern
H. J. White

Hobart
L. E. Dupes
R. W. Kraft
R. M. May
A. G. Miller
Wm. R. Storer
Wait Griswold

Lowell
Neal Davis
James Shanklin

Whiting
O. F. Benz
David W. Bopp
Harry Brandman
Frank R. Doll
Clementine Frankowski
Clifford M. Jones
L. T. Kudele
A. J. Lauer
Jeremiah A. McCarthy
D. H. Rudser
Harry Silvian
Theodore J. Smith
Peter Stecy
George A. Thegze
L. J. Wisch

LAPORTE COUNTY

Hanna
H. A. Garner

Lacrosse
D. D. Oak

LaPorte
C. E. Burleson
E. F. W. Crawford
C. B. Danruther
R. A. Fargher
R. B. Jones
J. N. Kelly
Robert M. Kelsey
G. W. Kimball
James Kistler
G. O. Larson
E. E. Linn
W. B. Martin
S. P. Morgan . .
A. C. Przednowek
W. W. Ross
A. R. Simon
R. F. Wilcox

Michigan City
T. D. Armstrong
E. G. Blinks
Harry A. Briggs
H. L. Brooks
Norman R. Carlson
S. J. Donovan
F. M. Fargher
Palmer R. Gallup
M. D. Gardner

R. A. Gardner
R. A. Gilmore
O. B. Johnson
John T. Kemp
D. J. Kennington
J. J. Kerrigan (H)
R. L. Kerrigan
Aimee R. Killough
George M. Krieger
F. V. Martin
J. R. Phillips
Leonard F. Piazza
J. D. Price
Nelle C. Reed
N. C. Reglien
Lawrence M. Robrock
L. E. Stephenson
Frank R. Warren
P. H. Weeks
L. A. Wilson

Rolling Prairie

C. W. Brown

Union Mills

Louis Moosey

Westville

Warren Baker
R. J. Sanderson

LAWRENCE COUNTY

Bedford

L. H. Allen
R. P. Austin
Norman R. Byers
Joseph Dusard
Charles B. Emery
Chas. H. Emery
Frank D. Martin
A. E. Newland
John R. Pearson
H. C. Ragsdale
Morrell E. Simpson
Robt. B. Smallwood
Chas. E. Stone
R. E. Wynne

Heltonville

Jasper Cain

Mitchell

James D. Byrns
Morris E. Cohen
J. R. Hamilton
Ralph G. Rohner
Walter C. Sherwood
W. S. Workman (H)

Oolitic

Claude Dollens

Williams

J. T. McFarlin

MADISON COUNTY

Alexandria

J. L. Carpenter
J. J. Gibson
F. G. Keller
George H. Overpeck

Anderson

C. L. Armington
John C. Armington
Robert Armington
M. A. Austin
Kenneth D. Ayres
C. H. Brauchla
Earl E. Brock
A. W. Collins
E. M. Conrad
Rex Dixon
John C. Drake
A. W. Elsten
A. D. Erehart
H. W. Gante
F. C. Guthrie
Lee Hunt
Thomas M. Jones
B. A. King
Jos. W. King
O. A. Kopp
James L. Lamey
P. T. Lamey
Sam W. Litzenberger
J. A. Long
Paul L. Long
V. G. McDonald
O. E. McWilliams
Doris Meister
George B. Metcalf
W. M. Miley
George Moore
Paul Leon Nelson
L. L. Nesbit
D. S. Quickel
John I. Rinne, Jr.
Lloyd Rosenbaum
Guy E. Ross
Clarence V. Rozelle
W. L. Sharp
T. J. Stephenson
S. J. Stottlemyer
Milo C. Wells
G. B. Wilder
F. M. Williams
C. L. Willson
F. B. Wishard
Cecil S. Wright
R. O. Zierer

Elwood

Perry Cotton
J. E. Cullipher
H. W. Fitzpatrick
W. H. Hoppenwrath
W. M. Hoppenwrath
W. A. Lauderman
R. R. Ploughe

Frankton

J. C. Miller
Web Peck
Raymond Russell

Lapel

John I. Rinne

Markleville

D. N. Conner

Pendleton

Wm. D. Hart
Albert T. Jones
C. P. McLaughlin
F. M. Williams, Jr.

Summitville

Seth Irwin
Byron Kilgore, Jr.
L. F. Mobley

MARION COUNTY

Acton

Walter McMannis

Beech Grove

Raymond Butler
Young D. Kim
James C. Rhea

Bridgeport

F. L. Hade

Cumberland

Hans August Schulze

Indianapolis

D. S. Adams
H. C. Adkins
Henry R. Alburger
Howard Aldrich
H. R. Allen
E. O. Alvis
R. J. Anderson
D. Lee Andrews
W. S. Ankenbrock
E. G. Anthony
Richard H. Appel
R. L. Arbuckle
Wm. E. Arbuckle
Aaron L. Arnold
Sidney S. Aronson
J. A. M. Aspy
Max A. Bahr
O. H. Bakemeier
James F. Balch
R. F. Banister
H. M. Banks
M. J. Barry
D. A. Bartley
G. W. Batman
Robert R. Beach
Paul Beard
T. J. Beasley
Norman M. Beatty
H. F. Beckman
R. C. Beeler
L. D. Belden
Henry J. Berger
J. K. Berman
M. E. Beverland
L. D. Bibler
Charles R. Bird
R. E. Blackford
A. Ebner Blatt
E. F. Bloemker
John J. Boaz
E. F. Boggs
C. B. Bohner
George S. Bond
Norman B. Booher
Clga B. Booher
Daniel L. Bower
Don D. Bowers
Geo. W. Bowman
David A. Boyd, Jr.
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Wayne Carson
James C. Carter
L. D. Carter
Oren E. Carter
R. S. Chappell
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Fredk. D. Cheney
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C. P. Clark
L. E. Clark
L. J. Clark
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Chester C. Conway
Glenn Conway
Robert E. Conway
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M. Cornacchione
Thomas A. Cortese
Thomas E. Courtney
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H. Bailey Cox
Harold M. Cox
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Eleanor H. Deal
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Murray DeArmond
Rlan F. Deer
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D. Hamilton Row
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Urbana Spink
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H. S. Thurston
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F. C. Walker
Robert K. Walker
Wesley Conrad Ward
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J. H. Warvel
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J. T. Wheeler
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Luther Williams
E. R. Wilson
Matthew Winters
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Abram S. Woodard, Jr.
Wm. V. Woods
J. W. Wright
Frederick Wyttenbach
John E. Wyttenbach
J. B. Young
John M. Young

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K. H. Stephens

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Oaklandon

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Donald W. Brodie
Frank Jennings

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Morris B. Paynter

Wanamaker

George Jones

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L. C. Lund
H. M. McCracken
Robt. B. Miller

Bremen

Wallace Buchanan
R. H. Draper
J. M. Thompson
H. D. Tripp

Bourbon

Cova R. Graham

Culver

M. D. Baker
C. G. Mackey
Donald Reed
H. H. Tallman

Lapaz

Homer L. Burke

Plymouth

L. D. Eley (H)
Thomas C. Eley
C. F. Holtzendorff
C. A. Inks
P. R. Irey
Harry Knott
May Patzer
Reynold Patzer
F. G. Perry
T. R. Possolt
Harry Knott
W. K. Schlosser
R. Clarence Stephens
L. W. Vore

Tyner

A. A. Thompson

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Bunker Hill

R. E. Barnett

Chili

H. E. Line

Converse

Fred Malott

Denver

C. B. Southard

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C. F. Rendel

Miami

James B. Shoemaker

Peru

J. B. Berkebile
E. Lee Burrous
O. U. Carl
H. W. Eikenberry
B. F. Eikenberry
Donald W. Ferrara
S. J. Ferrara
Cloyn R. Herd
Cecil F. Jordan
F. M. Lynn
S. D. Malouf
O. C. Wainscott
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F. H. Batman
Neal Baxter
R. M. Borland
J. P. Boulware
R. A. Demotte
Dillon Geiger
H. D. Hepner
Chas. Holland
D. J. Holland
Phillip Holland
J. E. Luzadder
Robt. Lyons
C. H. Marchant
B. D. Myers
M. F. Poland
Hugh Ramsey
Wm. C. Reed
Lewis C. Robbins
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R. C. Rogers
Ben R. Ross
Edith B. Schuman
V. Brown Scott
R. D. Smith
Robert C. Speas
J. N. Topolgus
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T. L. Wilson
James W. Wiltshire
Homer Woolery

Ellettsville

R. C. Austin

Smithville

G. L. Mitchell

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G. A. Collett
Thomas L. Cooksey
Fred N. Daugherty
L. H. Davis
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Wemple Dodds
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H. A. Kinnaman
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Robt. Millis
Wm. M. Mount
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Hawthorne C. Wallace
G. T. Williams

Darlington

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Ralph E. Otten

Ladoga

Frank T. Denny
Maurice E. Gross

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H. D. Kindell

Waveland

J. S. Noblitt

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F. D. Johnson

Wingate

C. B. Parker

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C. G. Bothwell
H. H. Dutton
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Edw. M. Pitkin
M. C. Pitkin
S. P. Scherer (H)
Austin D. Sweet
Harvey White
H. R. Willan

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Kenneth Comer
J. E. Comer
W. J. Stangle
C. H. White

Morgantown

M. G. Murphy

Paragon

L. M. Hughes

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J. W. Morr
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K. D. Sneary

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Gerald Shortz
H. O. Williams
S. J. Young

Ligonier

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H. A. Luckey
Robt. C. Luckey

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Keith Hammond

Leipsic

G. G. Colglazier

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Wm. E. Schoolfield

Samuel Scott
Oscar H. Stewart (H)

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John K. Spears

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C. F. Pectol
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S. C. Darroah

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Ott Casey
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I. D. White
C. M. Zink

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A. E. Sabin

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J. L. Saunders

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B. V. Lally

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E. R. Snyder

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A. L. Woods

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Bine Whitlatch
I. A. Whitlatch

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W. C. McConnell

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Willard C. Smullen
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W. B. Christophel
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J. E. Luzadder, Jr.

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Edson C. Fish
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M. W. Lyon
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G. E. Metcalf
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Milo Miller
William E. Miller
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C. A. Mott
Josephine Murphy
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Veronica Pennington
Andrew Petrass
Harold D. Pyle
Ruth F. Rasmussen
E. L. Rigley
Herman H. Rodin
F. T. Romberger, Jr.
George M. Rosenheimer
Carl J. Rudolph
Robert B. Sanderson
Isadore Sandock
Harry H. Sandoz
Louis A. Sandoz
C. E. Savery
H. A. Schiller*
K. E. Selby
C. M. Sennett
R. L. Sensenich
H. B. Shedd
P. G. Skillern
H. H. Slominski
R. W. Spenner
A. M. Sullivan
C. C. Terry
Ray H. Thomas
Maurice J. Thornton
P. C. Traver
Henry E. Vitou
W. G. Wegner
Agatha Wilhelm
J. L. Wilson

Walkerton
C. D. Linton

SCOTT COUNTY
Austin
C. R. Bogardus

Scottsburg
T. N. Hill
Marvin McClain
Floyd Napper
J. P. Wilson

SHELBY COUNTY
Fairland
R. N. Nigh
M. M. Wells

Flat Rock
J. A. Davis

Morristown
M. Maisoll Newhouse
V. C. Patten

Shelbyville
F. E. Bass
R. W. Gehres
Jewett Hord
L. F. Hulsman
Herbert Inlow
O. Fred Inlow
W. D. Inlow
Samuel Kennedy
H. D. Miller
P. R. Tindall
W. R. Tindall
W. W. Tindall
O. R. Wilson

Waldron
S. B. Coulson
J. E. Keeling

SPENCER COUNTY
Chrisney
C. L. Springstun
C. E. Moehlenkamp

Dale
John H. Barrow

Lamar
N. L. Medcalf

Newtonville
H. T. Harter

Richland
W. P. Jolly

Rockport
K. C. Atchison
Eva J. Buxton (H)
C. D. Ehrman
J. C. Glackman
J. C. Glackman, Jr.

St. Meinrad
V. V. Schriefer

STARKE COUNTY

Hamlet
J. L. DeNaut

Knox
J. F. DeNaut
J. R. Matthew

North Judson
Albert Fisher

STEUBEN COUNTY

Angola
Donald Creel
M. M. Crum
L. L. Eberhart
S. S. Frazier
W. H. Lane
O. H. Swantusch
W. F. Waller

Ashley
W. A. Van Nest

Fremont
B. A. Blosser
Ralph Hippensteel

Helmer
R. D. Denman

SULLIVAN COUNTY

Carlisle
J. S. Brown
Charles E. Whipps

Dugger
E. M. Deputy
F. M. Dukes

Fairbanks
H. E. Bland

Farmersburg
Harry O'Dell
J. T. Oliphant

Hymera
C. W. Asbury
C. U. Thralls

Shelburn
J. H. Wrork

Sullivan
Marion H. Bedwell
J. M. Billman (H)
C. F. Briggs
E. M. Corbin
James H. Crowder
J. R. Crowder
Paul Higbee
J. B. Maple
G. D. Scott
Irvin H. Scott
W. N. Thompson (H)

SWITZERLAND COUNTY

Patriot
Katherine Jackson

Vevay
Fred C. Bakes
L. H. Bear
R. M. Copeland (H)
Geo. E. Ellerbrook

TIPPECANOE COUNTY

Colburn
Robert H. Wagoner

Dayton
E. E. Hamilton

Lafayette
C. H. Ade
Mary Ade
J. L. Arbogast
A. C. Arnett
A. J. Bauer
R. H. Bayley
Harry Buhrmester
R. R. Calvert
O. U. Chenoweth
Ira Cole
W. T. Cox
A. B. Coyner
F. S. Crockett
Edward C. Davidson
C. V. Davisson
G. R. Donahue
M. J. Eaton
Russell A. Flack
M. G. Frasch
Thomas G. Graham
O. E. Griest
L. E. Harris
B. J. Harvey
G. W. Herrold
L. J. Holladay
F. P. Hunter
Charles Hupe (H)
R. G. Ikins
H. E. Klepinger
Manson M. Lairy (H)
H. J. Laws
Guy P. Levering
F. A. Loop
F. A. Loop, Jr.
O. R. Lynch
H. G. Martin
D. C. McClelland
D. H. McKinney
Adah McMahan
John S. Morrison
K. O. Neumann
Samuel Pearlman
F. W. Peyton
F. L. Pyke
Frank W. Ratcliff
Wm. M. Reser (H)
F. T. Romberger
C. H. Rommel
C. L. Rowland
E. B. Ruschli
P. H. Schmiedicke
J. W. Shafer
L. O. Shelty
L. C. Smith
Edward Stahl
J. W. Strayer
H. N. Swezey
G. A. Thomas
Geo. R. Tubbs
E. L. Van Buskirk
Earl VanReed
W. W. Washburn
C. M. Wray

West Lafayette
H. H. Ash
J. C. Burkle
Louise J. Meikle
S. J. Miller
Bertha Rose

Romney
O. L. McCay
E. T. Mitchell

West Point
Ramon B. DuBois

TIPTON COUNTY

Goldsmith
S. M. Cotton

Kempton
Albert E. Stouder

Sharpsville
W. F. Tranter

Tipton
A. E. Burkhardt
B. A. Burkhardt
J. V. Carter
R. L. Fullerton
H. E. Grishaw
G. H. Warne

Windfall
B. V. Chance
H. L. Ericson
E. B. Moser

VANDERBURGH COUNTY

Evansville
R. R. Acre
R. N. Adler
A. E. Allenbaugh
C. S. Baker
Herman Baker
J. S. Baker
I. C. Barclay
William E. Barnes
Bruce H. Beeler
Frank L. Bigsby
Stella Boyd
S. L. Bryan
C. R. Buikstra
John J. Cacia
Wm. C. Caldwell
A. F. Clements
Walter R. Cleveland
Wm. M. Cockrum
William L. Cole
W. H. Coleman
Herman Combs
Pearl B. Combs
John H. Combs
Earl Conover
I. E. Cottingham (H)
Albert L. Crane
Paul D. Crimm
C. W. Cullnane
W. L. Daves
Wm. D. Davidson
W. R. Davidson
E. K. Denzer
H. S. Dieckman
Thomas Dobbins
Geo. C. Dunlevy
M. S. Durkee
W. S. Ehrich
W. W. Eichelberger
J. A. Eisterhold
Henry J. Faul
Dallas Fickas
W. H. Field
E. L. Fitzsimmons
C. J. Folz
Wm. G. French
L. E. Fritsch
H. M. Garrison
J. L. Fuelling
John H. Hare
Paul Hart
C. A. Hartley, Jr.
F. Minton Hartz
Wm. F. Healy
Jos. M. Heberer
C. C. Herzer
Warren W. Hewins
V. S. Huggins
J. N. Jerome
G. C. Johnson
Stephen L. Johnson
H. M. Kauffman
R. L. Kleindorfer
Shirley C. Lang
C. S. Laubscher
Clarence Laubscher
S. R. Laubscher
W. J. Laval (H)
Joseph C. Lawrence
Chas. F. Leich
Emil Leslie
Jesse R. Logan
Harold D. Lynch
Paul Lynch
Pierce MacKenzie
D. V. McClary
J. H. McCool
W. E. McCool
J. D. McDonald
Walter McDowell
Leonard K. McMurtry
C. G. Macer
E. E. Mason
Rudolph A. Mehl
K. T. Meyer
Milton Miller
Minor Miller
Victor H. Mino
Martha Moore
Marion Morgan
Adeline F. Muelchi
Henry Nenneker
A. E. Newman
J. W. Phares
Walter Pollard
Julian Present
Willis L. Pugh
A. W. Ratcliffe
Isador Raphael
Bernard Ravdin
Marcus Ravdin
Clarence E. Reich
T. F. Reitz
J. S. Rich
Clifford Richey
Earl U. Robinson
Geo. M. Royster
R. A. Royster
H. C. Ruddick
Chas. P. Schneider
Chas. L. Seitz
Robert A. Smithson, Jr.
W. R. Springstun
Harmon L. Stanton
O. C. Stephens
F. C. Stewart
Urban Stork
Chas. C. Sutter
G. B. Underwood
Victor Varner
Robert W. Viehe
John W. Visher
H. Lowell Watson
Edgar H. Weber
H. G. Weiss
J. Y. Welborn
Mell B. Welborn
Wm. M. Wilhelmus
Charles F. Willis
J. H. Willis
George Willison
Ralph Wilson
S. W. Wishart
Wm. H. Wood
J. F. Wynn
C. W. Yeck
P. E. Yunker
Harold Zimmerman

VIGO COUNTY

Fontanet
Eugene Schumaker

New Goshen
J. B. Loving

Prairie Creek
J. R. Wilson

Riley
Virgil French
Norman Silverman

Seelyville
C. S. Carmichael

Terre Haute
O. O. Alexander
Orris T. Aller
W. C. Anderson
W. D. Asbury
E. R. Baldridge
W. O. Baldridge
H. L. Bernheimer
Curtis Bland
Leon L. Blum
M. J. Bohannon
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Stephen C. Bradley
Paul J. Bronson
A. L. Cabell
G. C. Carpenter
A. W. Cavins
Chas. N. Combs
Stuart R. Combs
G. C. Congleton
J. J. Connelly
W. G. Crawford
O. G. Cruikshank
Claude A. Curry
J. E. Dailey
H. B. Decker
L. J. Dugan
G. W. Dyer
Eugene Eisenlohr
D. H. Forsyth
J. E. Freed
J. O. Garrigus
D. A. Gerrish
Ivan Gilbert
John R. Gillum
H. T. Goodman
A. B. Graham
Edwin F. Gray
R. G. Harkness
E. R. Haslem
John R. Haslem
D. A. Hoover
J. J. Hoover
Edgar J. Hunt
W. B. Hunt (H)
B. M. Hutchings
A. F. Knoefel
Joseph Kunkler
Wm. C. Kunkler
C. Russell LaBier
Clarence R. LaBier
A. H. Lee
W. L. Lowenstein
C. L. Luckett
Chas. L. Mahoney
L. A. Malone
Don M. Mattox
E. L. Mattox
E. C. McBride
Noel S. McBride
F. G. McCarthy
W. C. McCormick
James W. McEwen
D. B. Miller
Albert M. Mitchell
James J. Moorhead
H. M. Mullikin
G. G. Musselman
E. O. Nay
E. S. Niblack
H. J. Pierce
C. E. Ragan
James V. Richart
Floyd Riggs
Milton M. Rubin
F. E. Sayers
Edw. J. Schott
Etta B. Selsam
V. A. Shanklin
Louis Siebenmorgen
I. H. Sloss
S. A. Smoots
James Spigler
O. R. Spigler
W. E. Stewart
Daniel S. Strong
John M. Sullivan
F. A. Tabor
M. C. Topping
D. R. Ulmer
Arnold Unterback
C. R. Van Arsdall
M. B. Van Cleave
H. R. Vandivier
Edward C. Voges
Frank L. Wedel
J. H. Weinstein
James V. White
F. E. Wiedemann
Fred Wilson
Charles Wyeth
J. Rudolph Yung
E. T. Zaring
Paul F. Zwerner

WABASH COUNTY

LaFontaine
Robert McKay
J. L. Walker

North Manchester
G. K. Balsbaugh
Z. M. Beaman
O. G. Brubaker
Joy F. Buckner
L. Z. Bunker
Lucille Carman
Chas. E. Cook
I. E. Perry
G. W. Seward
J. L. Warvel

Roann
James G. Kidd

Urbana
H. P. Parker

Wabash
Edgar K. Black
L. E. Jewett
Minnetta Jordan
G. M. LaSalle
R. M. LaSalle
R. A. Naugle
E. D. Pearson
Wm. Pearson
Arthur P. Rhamy
George E. Scott

Lorin Siegelmien
A. J. Steffen
N. H. Thompson
F. M. Whisler

WARRICK COUNTY

Boonville

Bowen Hoover
DeWitt Loomis
C. L. Luckett
J. T. Samples
W. C. Stover
Paul Wilson

Elberfeld

J. H. Gabhart
L. S. Taylor

Newburgh

Chas. M. Wilhelmus

Tennyson

C. E. Springstun

WASHINGTON COUNTY

Campbellsburg

Thos. K. Tower

Pekin

Wm. L. Green
Philip L. Mull

Salem

Donald Colglazier
Irvin Huckleberry
J. I. Mitchell
Claude B. Paynter
L. W. Paynter
Warren Tucker

WAYNE-UNION COUNTIES

Cambridge City

Loren Ake
Paul G. Hill
C. E. Kenyon
Jos. N. Study (H)

Centerville

W. M. Barton

Dublin

D. L. Lutes

Fountain City

Leon T. Cox

Hagerstown

Chester A. Marsh
Wm. Miller

Liberty

Franklin T. Dubois
James F. Lewis
W. B. McWilliams
W. A. Thompson

Milton

Edgar C. Denny

Richmond

Hubert E. Allen
W. E. Ballenger
Paul W. Blossom
C. S. Bond (H)
F. P. Buche
J. C. Clawson
Frank H. Coble
Volney N. Fackler
V. C. Griffis
Harvey Hadley
F. E. Hagie
Carl Harmon
Gladys H. Harmon
George R. Hays
R. L. Hiatt
Curtis R. Hoffman
E. E. Holland
C. J. Hufnagel
Gayle J. Hunt
George B. Hunt
Paul S. Johnson
Ernest F. Jones
F. E. Keith
Jos. H. Kinsey
F. W. Krueger
Glen W. Lee
Russell Malcolm
S. C. Markley
Elwood J. Meredith
W. L. Misener
Paul S. Pentecost
C. L. Poston
H. P. Ross
L. F. Ross
Richard Schillinger
Hugh Shane
Allen Stamper
Howard E. Sweet
W. R. Taylor
Wm. C. Vance
Horace Wanninger
E. B. Weinstein
Arthur J. Whallon
Mary Wickens
A. M. Winklepleck
G. H. Wisener
M. W. Yencer

WELLS COUNTY

Bluffton

H. D. Brickley
Chas. E. Caylor
Harold D. Caylor
Truman E. Caylor
T. O. Dorrance
Jack L. Eisaman
Max M. Gitlin
Wm. A. Gitlin
O. G. Hamilton
I. N. Hatfield (H)
C. H. Mead
George B. Morris
Allen C. Nickel
H. Brooks Smith

Liberty Center

Chas. M. Gingerick

Ossian

E. W. Dyar
W. E. Hardin
R. C. Wybourn

Zanesville

J. L. McBride (H)

WHITE COUNTY

Burnettsville

J. P. Galbreth

Brookston

Charles J. Brockway
G. L. Derhammer

Monon

W. W. Houser
S. E. McClure

Monticello

John C. Carney
H. B. Gable
Henry W. Greist
W. V. Morris

Wolcott

W. A. Spencer

WHITLEY COUNTY

Churubusco

J. H. Briggs
E. A. Hershey

Columbia City

Otto F. Lehmberg
Arthur Leiter
E. V. Nolt
Benj. F. Pence
O. V. Schuman (H)

Larwill

L. W. Tennant

South Whitley

P. A. Garber
V. P. Huffman
W. Ernest Wilkin

MEMBERS RESIDING OUTSIDE OF INDIANA

W. B. Adams, Charlotte, N. C. — Marion
C. N. Baganz, Lyons, N. J. — Wells
M. R. Bascomb, Calumet City, Ill. — Lake
G. D. Beamer, Brooklyn, N. Y. — Carroll
R. W. Blackford, St. Louis, Mo. — Marion
Max E. Blue, Burkesville, Ky. — Kosciusko
W. J. Bogue, Long Beach, Cal. — Wabash
J. H. Clark, Winter Park, Fla. — Fayette-Franklin
J. O. Conklin, Paris, Ill. — Vigo
A. J. Cramp, Ft. Lauderdale, Fla. — Porter
Arthur L. Cramp, Gilman, Wis. — Jasper-Newton
L. L. Culp, Des Moines, Iowa — Allen
Herbert E. Dester, Basnia, Via Raipur, C. P. India — Marion
Joseph Diamondstein, Calumet City, Ill. — Lake
J. F. Dinnen, Cleveland, Ohio — Allen
Lt.-Col. J. W. Duckworth, Manila, P. I. — Marion
B. E. Fitzgerald, Fairland, Ohio — Marion
Marcus H. Flinter, Phoenix, Ariz. — White
N. C. Folkening, Detroit, Mich. — Marion
John E. Graf, Chicago, Ill. — Marion
Verne K. Harvey, Bethesda, Md. — Marion
Albert Heard, Nashville, Tenn. — Vanderburgh
Chester A. Hicks, Cochran, Ga. — Dubois
Don G. Hilldrup, Baltimore, Md. — Marion
Claude D. Holmes, Fort Knox, Ky. — Marion
G. R. Jewett, Lincoln, Neb. — Wabash
Lewis E. Jolly, Pittsburgh — Henry
J. M. Kercheval, Coldwater, Mich. — LaGrange
Charles K. Kincaid, Ann Arbor, Mich. — Floyd
Peter Knoefel, Louisville, Ky. — Vigo
H. K. Langdon, Tucson, Ariz. — Marion
J. A. Little, Evanston, Ill. — Cass
H. F. Machlan, Hines, Ill. — Marion
Theo. P. Mantz, Charleston, W. Va. — Marion
M. M. McDowell, Danville, Ill. — Knox
A. W. Marcovich, Chicago, Ill. — Lake
E. L. Mock, Dallas, Texas — Knox
William McQueen, Sarasota, Fla. — Marion
John R. Miller, Salmon, Idaho — Marion
A. H. Northrup, Clearwater, Fla. — Huntington
C. J. Overman, Orlando, Fla. — Grant
Minerva B. Pontius, Ann Arbor, Mich. — Vanderburgh
S. M. Radivojevic, Camp Custer, Mich. — Porter
Ross W. Rissler, Boston, Mass. — Marion
E. S. Roberts, Lake City, Fla. — Marion
William A. Sandy, Rantoul, Ill. — Marion
Fred F. Shepard, College Corner, Ohio — Wayne-Union
S. G. Silverburg, Waco, Texas — Del.-Blk.
E. M. Sirlin, Fort Moultrie, S. C. — St. Joseph
Fred C. Smith, Los Angeles, Calif. — Marion
Stewart Smith, Brattleboro, Vt. — Marion
J. S. Stanley, Youngstown, Ohio — Lake
Joseph Steininger, Dewey, Okla. — Lake
H. G. Steinmetz, Arlington, Va. — Monroe
Howard A. Stellner, N. Chicago, Ill. — Marion
A. M. Targow, Los Angeles, Calif. — Lake
V. A. Teixler, Chicago, Ill. — Marion
Morris C. Thomas, Ft. Knox, Ky. — Marion
A. B. Thompson, Veteran's Admin., Wis. — Spencer
C. J. Trout, Philadelphia, Pa. — Tippecanoe
Paul C. Vietzke, Talihina, Okla. — Lake
H. T. Wagner, New York, N. Y. — Marion
E. H. Warnock, Los Angeles, Calif. — Jasper-Newton
Howard S. Williams, Jackson, Miss. — Marion
R. H. Williams, Baltimore, Md. — Madison
J. D. Winebrenner, Ann Arbor, Mich. — Marion

1941 DUES ARE PAYABLE NOW!

Deaths

William A. Spurgeon, M.D., widely known Muncie physician and manufacturer, died at his home there, October twenty-second, aged eighty-eight years. Dr. Spurgeon graduated from the Physio-Medical College of Indiana, Indianapolis, in 1875. He established his practice in Muncie, and in 1897 was appointed to the Board of Medical Registration and Examination and was reappointed by each succeeding Indiana governor until 1933, when he resigned from the Board. In 1913, Dr. Spurgeon abandoned active practice to become president of the Muncie Gear Works, which post he held until 1929. He was a member of the Muncie Academy of Medicine, an honorary member of the Delaware-Blackford County Medical Society, an honorary member of the Indiana State Medical Association, and a member of the American Medical Association.

Dr. Spurgeon became interested in the question of interstate reciprocity in medical licensure soon after his appointment to the State Board of Medical Registration and Examination, and was active in organizing the American Confederation of Reciprocating Medical Examining Boards, for which he wrote the constitution and by-laws, and he served as president of the organization for several years. He was a writer and lecturer of great ability.

* * *

John C. Emme, M.D., of Harlan, died in a Fort Wayne hospital, October twenty-fifth, after a long illness. Dr. Emme graduated from the Indiana University School of Medicine in 1912 and had practiced at Harlan for twenty-three years.

* * *

Jesse E. Saunders, M.D., of Burket, died November tenth, aged seventy years. Dr. Saunders graduated from the Curtis Physio-Medical Institute in Marion, Indiana, in 1895, and had practiced in Burket for more than thirty years.

George E. Denny, M.D., of Madison, died following a heart attack at his home in Madison, October twenty-ninth. Dr. Denny was seventy years old. He had served as a member of the state legislature, and had conducted a general practice in his community for more than thirty-five years. In 1937 he was appointed superintendent of the Muscatatuck Colony at Butlerville, from which position he resigned in August of this year because of ill health.

Dr. Denny formerly operated the Denny Clinic at Madison, and later built the Hillside and the Denny hotels there.

Dr. Denny graduated from the University of Louisville, School of Medicine, Louisville, Kentucky, in 1893, and was a member of the Jennings County Medical Society, the Indiana State Medical Association, and the American Medical Association.

* * *

Nathan I. Kithcart, M.D., aged eighty-nine years, Whitley county's oldest physician, died at his home in Columbia City, October twenty-ninth. Dr. Kithcart graduated from the Medical College of Ohio, Cincinnati, in 1881, and settled in Whitley county in 1875. He retired from active practice several years ago. Dr. Kithcart was an honorary member of the Whitley County Medical Society, and also of the Indiana State Medical Association.

* * *

Charles E. Mayfield, M.D., of Wanatah, aged fifty-nine years, died November fourth, at his home. Dr. Mayfield had been ill for two years. He went to LaPorte county in 1913 after graduating from the Kentucky School of Medicine at Louisville in 1905, and he served two terms as coroner. Dr. Mayfield was a member of the LaPorte County Medical Society, the Indiana State Medical Association, and the American Medical Association.

News Notes

Dr. Samuel J. Ferrara of Peru and Miss Ruth Ellen England of New Castle were married October eleventh.

Dr. Herman G. Haffner has announced the opening of an office in the Wayne Pharmacal Building at Fort Wayne for the practice of dermatology.

Dr. Clarence Bunge has been appointed assistant physician at the Logansport State Hospital.

Dr. George W. Macy of Indianapolis has taken over the office and equipment of the late Dr. M. C. McKain in Columbus.

Dr. Anna Louise Milleson of Terre Haute and Dr. Joseph F. Mohr (dentist) of Terre Haute were married October thirty-first in Indianapolis.

Dr. H. G. Coleman, who has been practicing medicine at Odon for the past five years, has

opened an office in Washington, Indiana, where he will conduct a general practice.

Dr. Max Garber of Warsaw has gone to Baltimore, Maryland, for two years, where he will study pediatrics at Johns Hopkins University.

Dr. Walter A. Dycus of Evansville and Miss Edith Flanigan of New Albany were married at DePauw Memorial Methodist Church, October twenty-fifth.

Dr. J. H. Stewart has announced the opening of an office at 803 South Boots Street, Marion. Dr. Stewart has been practicing at Parker, Indiana.

Dr. Marcus Ravdin of Evansville has been honored with a life membership in the American Academy of Ophthalmology and Otolaryngology. The award is given to physicians who have been Academy members for thirty years and who have been "of service to humanity."

Commemorating the forty-seventh year of the Welborn-Walker Hospital in Evansville, the hospital staff, in cooperation with the Vanderburgh County Medical Society, presented a series of operative clinics and lectures, November twelfth. Dr. George W. Crile, Jr., of Cleveland, and Dr. Howard D. Fabing, of Cincinnati, conducted the program.

Judge Dan Pyle of South Bend was made president for 1941 of the State Conference on Social Work at the close of the fiftieth conference, which was held in Indianapolis early in November. Vice-presidents elected are Leo M. Rappaport of Indianapolis, Rev. H. L. Lanahan of Anderson, Mrs. Perry W. Lesh of Indianapolis, and Dr. Herman M. Baker, Evansville. Thurman A. Gottschalk, director of the State Department of Public Welfare, was re-elected secretary, and Randall Shake, of Indianapolis, was renamed treasurer for the third time. Tom L. Metsker was reappointed executive secretary. Dr. John W. Ferree was elected to the Board of Directors to replace Dr. Verne Harvey.

Dr. George M. Brother has been made chief of the Bureau of Local Health Administration in the State Board of Health to succeed Dr. J. W. Ferree, who is now director of the State Board of Health.

Dr. M. M. Wells, Fairland physician, was honored by 350 residents of his community who held a meeting at the Fairland school to pay tribute to the man who has given them medical attention over a period of thirty-eight years.

Dr. and Mrs. Howard A. Bosler and daughter have moved to New Paris, where Dr. Bosler will conduct a general practice. Dr. Bosler has been in charge of a medical program for the Church of the Brethren in their mission hospital in northern Nigeria, West Africa, for the past eight years, and returned from there early this year.

The Army Medical Library has a special collection of authors' reprints, catalogued by author. These form a bibliography of the work of any given writer and are a valuable supplementary source of material when the volume of original publication is temporarily unavailable at the bindery or on loan.

Dr. George A. Shoemaker, for many years a practicing physician in North Manchester, died at his home in Jennings, Louisiana, October twenty-second. Dr. Shoemaker was eighty years old. He began his practice in North Manchester in 1900 and left there in 1926.

The Post Graduate Medical Assembly of South Texas will hold a three-day assembly at Houston, December 3, 4, and 5, 1940. Guest speakers include Dr. Floyd T. Romberger, of Lafayette, who will speak each day. His subjects will be "Useful Anesthetic Agents," "Adaptive Anesthesia," and "Spinal Anesthesia—Twelve Years' Experience."

Dr. Fred McK. Ruby, eye, ear, nose and throat specialist of Union City, Indiana, recently was elected an officer of Rotary International. He was named Governor of District 155 by delegates representing the 5,000 Rotary clubs of the world at the annual international convention in Havana, Cuba. As a District Governor of Rotary International, Dr. Ruby will visit the Rotary clubs of twenty-three Indiana cities which comprise the 155th District and will counsel with and advise club officers on matters pertaining to Rotary service activities and club administration. He will hold office until the 1941 convention in Denver, Colorado, next June.

Dr. Ralph Irving Lloyd, Brooklyn, N. Y., was named president-elect of the American Academy of Ophthalmology and Otolaryngology at the annual meeting in Cleveland in October. Dr. William P. Wherry, Omaha, Nebraska, was reelected executive secretary-treasurer, and Dr. Secord H. Large, Cleveland, comptroller. The Academy sponsored the first Pan-American Congress of Ophthalmology, which was organized on a permanent basis, with Dr. Harry S. Gradle, Chicago, as president. Tentative plans were made for a meeting of this congress in Montevideo, Uruguay, in 1943.

The National Health Library, which completed two decades of service this year, has announced its removal from the RCA Building in Rockefeller Center to 1790 Broadway, New York City. Since its establishment twenty years ago, this Library has brought together one of the best collections of source material in the United States on public health, sanitation, health education and related

subjects. It includes 6,000 volumes and 30,000 pamphlets. More than 500 medical and public health periodicals are received regularly from all parts of the world. Administered by the National Health Council, the Library is intended primarily for the use of the seventeen health organizations which are members of the Council. Individuals who are not members of the supporting organizations may have the privilege of using the Library by paying a small annual fee.

The alien registration program closes on December 26, 1940. Organizations and citizens are urged to help non-citizens comply with the Alien Registration Act. Director Earl G. Harrison of the Department of Justice has pointed out that there are many aliens still to be registered. It is estimated that some 3,600,000 aliens will be registered by the end of the registration period. There is no fee connected with alien registration or fingerprinting. Penalties for non-registration are a fine of $1,000 or six months' imprisonment, or both.

In accordance with its Articles of Incorporation, the American Board of Obstetrics and Gynecology has elected Dr. Norman F. Miller, of Ann Arbor, Michigan, and Dr. Willard R. Cooke, of Galveston, Texas, as members, directors, and examiners, to fill the unexpired terms of Dr. Jennings C. Litzenberg and Dr. Grandison D. Royston, both of whom resigned on October 15, 1940. These replacements make a total of four changes in personnel on the Board during the past three years.

MEDICAL HISTORY SOCIETY TO MEET IN DECEMBER

Following is the program for the December meeting of the Indiana Association for the History of Medicine:

Introductory remarks by W. D. Inlow, president, Shelbyville.

Biography of Dr. John S. Bobbs, by Mrs. Ogla S. Goldman, Indianapolis.

Amos Twitchell's Copy of "Beaumont's Physiology of Digestion," by Dr. E. F. Kiser, Indianapolis.

Daniel Drake and His Contributions to Education, by Emmett F. Horine, M.D., Louisville, Kentucky.

This meeting of the Indiana Association of the History of Medicine will be held in conjunction with the meeting of the Indiana History Society in Indianapolis, December fourteenth, 10 a. m., at the Indiana State Library. Interested physicians are invited to attend.

SUBCOMMITTEES OF THE HEALTH AND MEDICAL COMMITTEE OF THE COUNCIL OF NATIONAL DEFENSE

Subcommittees on medical education, hospitals, industrial medicine, industry, nursing, and Negro health have been announced by the Health and Medical Committee of the Council of National Defense. The general committee, headed by Dr. Irvin Abell of Louisville, Kentucky, former president of the American Medical Association, was appointed by President Roosevelt on September 19 to survey and coordinate the medical resources of the country in the interests of national defense. Announcement of the subcommittees was made by Dr. Abell from his office at the Public Health Service Administration Building in Washington.

Dr. C. Sidney Burwell, Dean, Harvard Medical School, Boston, was named chairman of the subcommittee on medical education. Other members of this group are Dr. L. R. Chandler, Stanford University Hospital, San Francisco; Dr. Harold S. Diehl, Dean of the School of Medicine, University of Minnesota; Dr. Willard C. Rappleye, Commissioner of Hospitals of the City of New York; and Dr. John H. Musser of the Tulane Medical School, New Orleans.

The subcommittee on hospitals includes Dr. Winford H. Smith, Director of Johns Hopkins Hospital, Baltimore, Chairman; the Rev. Alphonse M. Schwitalla, President, Catholic Hospital Association of United States and Canada, St. Louis; Dr. Malcolm T. MacEachern, Associate Director of American College of Surgeons, Chicago; Dr. Claude W. Munger, Chairman of the Defense Committee of the American Hospital Association, New York; and Dr. Nathaniel W. Faxon, Superintendent of the Massachusetts General Hospital, Boston.

The subcommittee on industrial medicine was set up with Dr. Clarence D. Selby, Medical Consultant of General Motors Corporation, Detroit, as Chairman. Other members of this subcommittee included Professor Philip Drinker, Harvard School of Public Health, Boston; Dr. E. C. Holmblad, Chicago; Dr. George M. Smith, Yale University Medical School, New Haven; Dr. Lloyd Noland, Chief Surgeon, Tennessee Coal, Iron, and Railroad Company, Fairfield, Alabama; Dr. William P. Yant, Mine Safety Appliance Company, Pittsburgh; and Dr. A. J. Lanza of the Metropolitan Life Insurance Company, New York.

A subcommittee on dentistry was named with Dr. C. Willard Camalier, Washington, D. C., former president of the American Dental Association, as chairman.

Miss Mary Beard, Director of Nursing of the American Red Cross, was named Chairman of a subcommittee on nursing, and Dr. M. S. Bousfield of the Julius Rosenwald Fund, Chicago, will head a subcommittee on Negro health.

In announcing these subcommittees, Dr. Abell stated that these subcommittees would assist the Defense Council's Medical Committee in coordinating health and medical activities and in "mobilizing the medical resources of the nation for national defense."

Other members of the Health and Medical Committee on national defense as appointed by the President and the National Defense Council are Major General James C. Magee, Surgeon General of the Army; Rear Admiral Ross T. McIntyre,

Surgeon General of the Navy; Dr. Thomas Parran, Surgeon General of the United States Public Health Service; and Dr. Lewis H. Weed, Chairman of the Division of Medical Sciences of the National Research Council.

The general committee has already had two meetings and in addition to setting up its various subcommittees, has considered the need for developing research projects dealing with special problems of military medicine and hygiene. Examples of such special problems are: finding better methods of treatment of war wounds, exploring the most modern usages of recently discovered chemicals in the treatment and prevention of disease, problems of aviation medicine, and the most effective measures for the control of the venereal diseases.

The committee is also concerned with the necessity for providing health services in areas surrounding military camps and cantonments, and with the health and medical problems resulting from greatly expanded industrial development in certain regions of the country.

The committee hopes to find ways and means of providing adequate medical facilities and personnel, including hospitals, physicians and surgeons, dentists, and nurses for the armed forces of the nation without the serious disruption of these essential services on the home front. It is enlisting the services and coordinating the efforts of both governmental and private agencies in building up the health and medical facilities of the nation as part of the present peacetime mobilization.

INDIANA UNIVERSITY NEWS NOTES

Six of the eleven Hoosier physicians recently made fellows of the American College of Surgeons are graduates of the Indiana University School of Medicine. The I.U. men honored in the selection are: Drs. Ernest I. Brenner, Winchester; Theodore R. Hayes, Muncie; Wesley M. Hoppenrath, Elwood; William H. Howard, Hammond; Sam W. Litzenberger, Anderson, and Allan L. Sparks, Indianapolis.

Three Bloomington physicians, Drs. Raymond M. Borland, Dillon D. Geiger, and William C. Reed, have been appointed as lecturers in applied anatomy in the Indiana University School of Medicine at Bloomington. The appointments were described by Dean W. D. Gatch as designed to provide clinical studies of the practical applications of anatomy in the first year of the University's Medical School.

Dr. Borland, whose designation on the University faculty lists will be that of lecturer on X-ray Applications of Anatomy, is also an instructor in hygiene at the University. Lectures on the anatomy of the nose and throat under the new appointments will be given by Dr. Geiger. Dr. Reed will lecture on the applied anatomy of the body.

Society Reports

INDIANA STATE MEDICAL ASSOCIATION

COUNCIL MEETING

(French Lick Session)

First Meeting

The Council of the Indiana State Medical Association convened for a luncheon-business meeting in the Blue Room of the French Lick Springs Hotel, French Lick, at 12:30 p. m., Tuesday, October 29, 1940, with Dr. M. A. Austin of Anderson, chairman, presiding. Roll call indicated 100% attendance. The following were present:

Councilors

First District—I. C. Barclay
Second District—H. C. Wadsworth
Third District—W. H. Garner
Fourth District—J. C. Elliott
Fifth District—O. O. Alexander
Sixth District—Samuel Kennedy
Seventh District—C. J. Clark
Eighth District—M. A. Austin
Ninth District—F. T. Romberger
Tenth District—James M. White
Eleventh District—Ira Perry
Twelfth District—A. J. Sparks
Thirteenth District—Alfred Ellison

Officers

President—Karl R. Ruddell
President-Elect—A. M. Mitchell
Treasurer—A. F. Weyerbacher
Editor of The Journal—E. M. Shanklin

Members of Executive Committee

C. A. Nafe, Chairman
C. H. McCaskey
T. A. Hendricks, Executive Secretary

Legislative Committee

N. M. Beatty, Co-Chairman

General Arrangements Chairman

George Dillinger

The members of the Council rose and paid a silent tribute to the memory of Dr. M. C. McKain. Dr. Karl Ruddell presented the following letter to Dr. Austin, chairman, to be read before the Council.

"Dear Dr. Ruddell: I scarcely know how to go about this, so maybe you can use your judgment in going about it in a logical way. I wish to sincerely express our appreciation for every consideration and kindness shown us in Mac's tragic death. So many doctors came who did not register and so many others telegraphed that I know I cannot reach all individually.

"Mac practiced medicine because he loved it, and he was quite devoted to the State Organization. May I offer this pledge to your Organization: 'I shall to the best of my ability retain a personal interest in all its activities and I sincerely hope in years to come to replace Mac's loss insofar as I can by giving to the profession two boys in whom I shall constantly try to instill Mac's unswerving ethical code and to meet his most outstanding quality, tolerance.'

"Again, thank you, all, more than I can express in words.

Respectfully,
HAZEL McKAIN."

Dr. C. J. Clark moved that the reading of the minutes of the midwinter meeting of the Council,

January 7, 1940, be dispensed with; the motion was seconded by Dr. A. J. Sparks and unanimously carried. These minutes were printed in the February 1940 issue of THE JOURNAL; there were no corrections to the minutes to be made.

COUNCILOR REPORTS

Councilor district reports were unanimously accepted as printed in the October JOURNAL and the House of Delegates Handbook.

Dr. Austin announced that dates for next year's district meetings should be set as soon as possible and sent to headquarters so that conflicts may be avoided. The following dates have been set:

FOURTH DISTRICT—MAY, 1941, AT BATESVILLE.
SIXTH DISTRICT—MAY 15, 1941, AT NEW CASTLE.
NINTH DISTRICT—MAY 22, 1941, AT FRANKFORT.
TENTH DISTRICT—SEPTEMBER 26, 1941, AT ROBY.

Dr. Austin also cautions that care be taken not to permit a conflict with the Indiana University School of Medicine Postgraduate Course, April 28 to May 2, 1941.

CONVENTION ARRANGEMENTS

Dr. George Dillinger expressed his hope that the French Lick Convention would be one of the largest conventions ever held if the registrations continued at the same rate and the weather remained favorable. His thanks and appreciation were expressed for the splendid cooperation he had received. Dr. Dillinger added that there was a small part of the Convention Fund still unused.

UNFINISHED BUSINESS

Dr. M. A. Austin, chairman, called the attention of the members of the Council to the items under unfinished business reminding them that they should have read the recommended changes scheduled to go before the last meeting of the House of Delegates. The items were concerning (1) election of officers, (2) age limit for honorary members, (3) a change in the Constitution taking out the word "material," (4) a change in the By-Laws taking out the word "material."

There were no further comments upon these items and they were sent to the House of Delegates and to Committees for reference and for their vote.

NEW BUSINESS

(1) The report of the Auditing Committee was accepted as printed in the Handbook.

(2) Matters referred to the Council by the Executive Committee at its meeting Monday evening, October 28, 1940:

(a) Dr. C. A. Nafe reporting on the matters that came up at the executive meeting referred to the change in the age limit and pointed out that this change might cost the Association approximately $6,000 in revenue.

(b) The proposal of a membership certificate was explained by Dr. Nafe. A member of the Indianapolis Medical Society, formerly from St. Louis, advised the committee that in St. Louis the certificate was displayed in the office. The Executive Committee wrote the Oklahoma Medical Association who has this plan. They sent the Indiana State Medical Association a copy of their certificate which reads:

> "The State Medical Association of Oklahoma. This is to certify that Dr. ———————— is a member in good standing in the Association for the current year and is also a member of the American Medical Association for 1940 and eligible to fellowship in that organization."

The Executive Committee wanted their certificate to differ from that of Oklahoma a little, but their idea was to have the certificates framed to insure their being used. The cost of framing would be around eight cents. Dr. Nafe added that they felt that popular use of these certificates might come to mean to the people the same as the AAA means to the traveling public. They would then know he is a member of his county society and state society and accept that certificate as a certain amount of recommendation. The Executive Committee simply proposed it to the Council not knowing whether it was advisable or not.

(c) Dr. A. J. Sparks inquired as to how it would be carried out. Dr. Nafe explained it would cost about three cents for the secretary of the local society to send them out upon receipt of payment of dues. Dr. James M. White declared that Lake County had a cardboard certificate which did not require framing; it carried the date in large colored letters with the printing superimposed on that and was displayed in the office.

(d) Dr. M. A. Austin suggested, if any were used, that they be cardboard with a hole at the top so they could be hung over a nail; however he doubted the appeal they might have inasmuch as even diplomas were not being displayed as previously. As regarded the framing, Dr. Austin felt the State Association should not pay for same since a doctor might well assume this cost if he cared to have the certificate on display.

(3) Dr. A. M. Mitchell reported on the demonstration of the polio work given in Terre Haute in September, under Dr. Greer of the Department of Welfare. This demonstration was the use of splints being used in the northern part of the state in the care of the victims of poliomyelitis. It was well received and everyone was happy to get the information as well as some samples of the restraining bandages made out of muslin. Dr. Mitchell suggested that the demonstration in the Annex of the Hotel be viewed by all as he felt it did something quickly for these polio victims which would take a long time to do in any other way, such as the use of solid splints. The Department of Welfare left in the hospitals two or three sets of the restraining bandages so they could make more if needed; they also left the diagrams demonstrating their use. It was further pointed out that it wasn't a question of their practicing medicine, but was rather to aid the doctor in taking care of these cases.

(4) Dr. M. A. Austin spoke of the appreciation of Lt. Col. Hitchcock for the cooperation he had received from the State Association and the profession in making up the Selective Service Boards

in Indiana. Dr. Austin then read the following letter which had been sent to Irvin Abell:

"Dear Dr. Abell:

"I believe you will be interested in knowing that the Indiana State Medical Association has been of invaluable assistance to me in selecting examining physicians, assistant examining physicians, medical advisory board members, and medical members for boards of appeal for the administration of the Selective Training and Service Act of 1940 in Indiana.

"The Indiana State Medical Association at my request, made recommendations for all of the above positions, and without exception the recommendations made to me by the Association have been appointed.

"Karl R. Ruddell, M.D., the President of the Indiana State Medical Association, has been generously cooperative. Mr. Thomas A. Hendricks, executive secretary of the Indiana State Medical Association, has been untiring in his highly successful effort to procure for me excellent medical personnel for the administration of Selective Service in Indiana.

"The Indiana State Medical Association can indeed be proud and gratified, as I am, of its fine work and cooperation in this emergency."

(Signed) M. Clifford Townsend, Governor.

(5) In connection with the Auxiliary of each county society, Dr. N. M. Beatty emphasized the need for the Auxiliary and commended their splendid work. He suggested that the county society help the Auxiliary to the extent of setting up an Advisory Board to guide the Auxiliary in this work.

(6) Election of editor of THE JOURNAL for 1941. Dr. E. M. Shanklin was nominated to succeed himself by Dr. James M. White; the motion was seconded by Dr. F. T. Romberger and Dr. Shanklin was unanimously reelected editor of THE JOURNAL for 1941.

(7) Election of two members to serve on editorial board for two years, one member to succeed Pierce MacKenzie of Evansville and one member to succeed J. B. Maple of Sullivan. As a result of a letter sent to each councilor in the State, there was only one nomination received; that was from the Delaware-Blackford County Medical Society, nominating Dr. Lall G. Montgomery. Dr. I. C. Barclay placed in nomination the name of Dr. Herman Baker of Evansville to succeed Dr. MacKenzie. There were no further nominations and Dr. C. J. Clark moved that nominations be closed. Dr. H. C. Wadsworth seconded the motion. Drs. Lall Montgomery and Herman Baker were unanimously elected.

(8) Dr. Ira Perry pointed out two resolutions he had sponsored: (a) that the names be placed in nomination at the Council meeting preceding the State meeting so the men nominated could be studied and their ability determined; (b) that the Constitution be changed to permit a member of the House of Delegates to be nominated. He expressed the fact that the Executive Committee and everyone he had talked with agreed to pass these two resolutions with the one exception of Dr. R. L. Sensenich of South Bend.

Mr. T. A. Hendricks explained that he was responsible for not getting the resolutions passed inasmuch as he had not put them before the House of Delegates. This was due to the change in the Constitution which had to be printed twice; since it was only printed once, it was not eligible for action. The second resolution was not presented to the Council before it went into Executive Session and since the Council did not meet again it, too, was overlooked. When this was recognized, Mr. Hendricks sent out letters asking for nominations so that the names might be made known to the Councilors. The result was the one nomination of Dr. Lall Montgomery. Mr. Hendricks wanted it understood that he was responsible, not Dr. Perry.

Dr. F. T. Romberger pointed out that there was a man from Lafayette on the editorial board and it was his thought that the nominees should come from districts which would make up a cross-section of the State.

Dr. E. M. Shanklin spoke further upon nominations for the editorial board.

The Chairman suggested that the election of the two nominees could be postponed if the Council so wished. The Council expressed the desire to proceed and thereupon unanimously elected Drs. Baker and Montgomery. It was further agreed upon that it be made part of the order of business of the January meeting to nominate members to the editorial board with the election being held at the first meeting during the State Meeting.

(9) Date for midwinter Council Meeting. It was moved by Dr. Clark and seconded by Dr. Romberger to set the date tentatively for January 12, 1941, approximately a week after the Legislature convenes. The dates were discussed by Drs. Wadsworth and Kennedy and Mr. Hendricks. The date of January 12 was voted the date of the midwinter meeting with the condition that it be changed if it were found that some logical reason warranted the change.

(10) Dr. A. M. Mitchell put before the Council the question as to what would be the status of the men called for service who did not keep up their dues. Dr. Sparks advised the Council that the Fort Wayne Society had instructed him to put a resolution before the House of Delegates to waive local dues. Dr. Romberger pointed out that he had found it was possible to maintain his dues when he served in the last war, but suggested that perhaps the decision would be sounder if left to the component county societies since they could determine the position of the man in question and whether or not he was financially able to pay the dues. The conclusion reached in the matter was to discuss the matter further, to carry it into the districts and decide at a later date upon either one of the two suggestions of the Executive Com-

mittee or formulate another plan. The two proposals were: (1) that the county society be permitted to judge the ability of the man to pay or not pay; (2) that the House of Delegates express their gratitude by paying the State Society dues out of the Reserve Fund in each instance where the man was unable to pay.

(11) Dr. Nafe reported that bookings were so heavy that convention dates could not be set for September at Indianapolis. Mr. Hendricks mentioned the plan in connection with joint meetings with other health groups, that the day meetings be devoted to one specified association and the night sessions be general ones embracing all associations. Drs. Clark, Nafe and Beatty discussed the matter further. The consensus was that a diplomatic refusal be made explaining that such a plan was not feasible; Dr. Austin appointed Dr. Beatty to carry the appeasement umbrella.

The Council adjourned and met in executive session.

THE COUNCIL

Second Meeting

(French Lick Session, October 31, 1940)

The second meeting of the Council was called to order at 8:15 a. m., Thursday, October 31, 1940, in the West Dining Room of the French Lick Springs Hotel, French Lick, immediately upon adjournment of the final meeting of the House of Delegates.

Roll call showed the following members present:

Councilors

First District—I. C. Barclay, Evansville
Second District—H. C. Wadsworth, Washington
Third District—W. H. Garner, New Albany
Fourth District—J. C. Elliott, Guilford
Sixth District—Samuel Kennedy, Shelbyville
Seventh District—C. J. Clark, Indianapolis
Ninth District—F. T. Romberger, Lafayette
Tenth District—James M. White, Gary
Eleventh District—Ira Perry, North Manchester
Thirteenth District—Alfred Ellison, South Bend

Officers

President-Elect, 1940—A. M. Mitchell, Terre Haute
President-Elect, 1941—M. A. Austin, Anderson
Attorney—Albert Stump, Indianapolis
Executive Secretary—T. A. Hendricks, Indianapolis

Dr. Samuel Kennedy was appointed chairman pro tem.

The minutes of the previous meeting were not read.

Upon the motion of Dr. C. J. Clark, seconded by Dr. Alfred Ellison, Dr. F. T. Romberger was elected chairman of the Council, to serve until January 1, 1941.

Dr. Ellison invited the officers and members of the Council to attend the annual meeting of the Thirteenth District Medical Society which will be held at Goshen on November 13, 1940.

The chairman called attention to the fact that the midwinter meeting of the Council would be held on January 12, 1941.

Dr. H. C. Wadsworth, Dr. J. M. White and Dr. Clark discussed the plan in operation at Indiana University for taking care of student health. Dr. Romberger said that a similar set-up at Purdue University was working very well.

The secretary spoke of the credit and recognition given the state association for the work done on the military preparedness program. He also spoke of the entangling situations that arose in making up the various boards due to the fact that the congressional and medical districts do not coincide.

Upon the motion of Dr. Clark, seconded by Dr. Wadsworth, and carried, the Council was adjcurned.

THOMAS A. HENDRICKS,
Executive Secretary.

INDIANA STATE MEDICAL ASSOCIATION

HOUSE OF DELEGATES

(French Lick Session, 1940)

First Meeting

The first meeting of the House of Delegates convened at 4:15 o'clock, Tuesday afternoon, October twenty-ninth, 1940, in the convention hall of the French Lick Springs Hotel. The president, Dr. Karl R. Ruddell of Indianapolis, presided.

Dr. George R. Daniels moved that the signed attendance slips be accepted as the roll call. The motion was seconded and carried. Attendance slips showed the following present:

County	*Delegates*
Allen:	M. R. Lohman, Fort Wayne
	M. B. Catlett, Fort Wayne
Boone:	C. G. Kern, Lebanon
Carroll:	C. E. Carney, Delphi
Cass:	B. W. Egan, Logansport
Clay:	H. H. Ward, Coalmont
Clinton:	N. B. Combs, Mulberry
Dearborn-Ohio:	George H. Hansell, Rising Sun
Decatur:	H. S. McKee, Greensburg
DeKalb:	Charles I. Weirich, Butler
Delaware-Blackford:	C. A. Ball, Muncie
	Guy Owsley, Hartford City
Elkhart:	A. C. Yoder, Goshen
Fayette-Franklin:	J. S. Leffel, Connersville
Floyd:	William Weaver, New Albany
Fulton:	A. E. Stinson, Rochester
Gibson:	Carl Clark, Oakland City
Grant:	Russell W. Lavengood, Marion
Greene:	Carl Porter, Jasonville
Hancock:	J. E. Ferrell, Fortville
Harrison:	William E. Amy, Corydon
Hendricks:	O. T. Scamahorn, Pittsboro
	W. T. Lawson, Danville
Henry:	Walter M. Stout, Newcastle
Huntington:	C. S. Black, Warren
Jackson:	G. H. Kamman, Seymour
Jay:	F. E. Keeling, Portland
Jefferson:	George A. May, Madison
Jennings:	D. W. Matthews, North Vernon
Kosciusko:	O. H. Richer, Warsaw
Lake:	P. Q. Row, Hammond
	T. W. Oberlin, Hammond
	C. M. Jones, Whiting
	C. R. Pettibone, Crown Point
	W. H. Howard, Hammond

County	Delegates
Lawrence:	R. B. Smallwood, Bedford
Madison:	C. V. Rozelle, Anderson
Marion:	Carl McCaskey, Indianapolis
	O. W. Sicks, Indianapolis
	James O. Ritchey, Indianapolis
	E. F. Boggs, Indianapolis
	Walter F. Kelly, Indianapolis
	H. V. Kahler, Indianapolis
	E. O. Asher, New Augusta
	Lacey L. Shuler, Indianapolis
	M. J. Spencer, Indianapolis
Marshall:	A. A. Thompson, Tyner
Monroe:	P. T. Holland, Bloomington
Montgomery:	T. Z. Ball, Crawfordsville
Morgan:	M. C. Pitkin, Martinsville
Noble:	W. F. Carver, Albion
Orange:	George Dillinger, French Lick
Porter:	George R. Douglas, Valparaiso
Posey:	H. E. Ropp, New Harmony
Putnam:	Earl Wiseman, Greencastle
Randolph:	J. S. Robison, Winchester
Ripley:	J. T. Carney, Batesville
Rush:	Robert D. Spindler, Milroy
St. Joseph:	Erwin Blackburn, South Bend
	G. M. Rosenheimer, South Bend
Scott:	Marvin L. McClain, Scottsburg
Shelby:	W. D. Inlow, Shelbyville
Spencer:	Victor V. Schriefer, St. Meinrad
Sullivan:	J. T. Oliphant, Farmersburg
Switzerland:	L. H. Bear, Vevay
Tippecanoe:	Earl Van Reed, Lafayette
	Gordon A. Thomas, Lafayette
Vanderburgh:	Minor Miller, Evansville
	R. R. Acre, Evansville
Vigo:	E. O. Nay, Terre Haute
Wabash:	O. G. Brubaker, North Manchester
Warrick:	P. B. Hoover, Boonville
Washington:	Claude Paynter, Salem
Wayne-Union:	W. A. Thompson, Liberty
Whitley:	Paul Garber, South Whitley

Councilors

First District:	I. C. Barclay, Evansville
Second District:	H. C. Wadsworth, Washington
Third District:	W. H. Garner, New Albany
Sixth District:	Samuel Kennedy, Shelbyville
Seventh District:	C. J. Clark, Indianapolis
Ninth District:	F. T. Romberger, Lafayette
Tenth District:	James M. White, Gary
Eleventh District:	Ira Perry, North Manchester
Twelfth District:	A. J. Sparks, Fort Wayne
Thirteenth District:	Alfred Ellison, South Bend

Past Presidents

E. M. Shanklin, Hammond
Charles N. Combs, Terre Haute
George R. Daniels, Marion
Charles E. Gillespie, Seymour
F. S. Crockett, Lafayette
J. H. Weinstein, Terre Haute
E. E. Padgett, Indianapolis
Herman M. Baker, Evansville
E. M. Van Buskirk, Fort Wayne

Officers

President—Karl R. Ruddell, Indianapolis
President-Elect—A. M. Mitchell, Terre Haute
Treasurer—A. F. Weyerbacher, Indianapolis
Executive Secretary—T. A. Hendricks, Indianapolis

Delegates to A.M.A.

H. G. Hamer, Indianapolis
D. F. Cameron, Fort Wayne

Alternate Delegate to A.M.A.

N. M. Beatty, Indianapolis

KARL RUDDELL: Dr. Carver, may we have the report on Credentials?

WALTER CARVER (Albion): Mr. Chairman, at this meeting there are:

Delegates	75
Councilors	10
Past Presidents and Officers	12
Total	97

The credentials of all delegates are in order, Mr. President.

KARL RUDDELL: According to Chapter IV, Section 3, of the By-Laws, 20 delegates constitute a quorum. The House of Delegates, therefore, is declared open and ready for the transaction of business.

The By-Laws may be amended at any annual session by a majority vote of all delegates present at that session, after the amendment has lain on the table for one day.

The House of Delegates may amend any article of the Constitution by a two-thirds vote of all delegates present at any annual session provided that such amendment shall have been presented in open meeting at the previous annual session and that it shall have been published twice during the year in THE JOURNAL of the Association.

Inasmuch as J. B. Berteling and M. C. McKain have been called in death, the Chair asks the House to rise in tribute to them.

(The House of Delegates rose in tribute.)

If we might now have a motion that the minutes of the previous meeting be dispensed with, please.

W. F. KELLY (Indianapolis): Mr. President, I move that the reading of the minutes be dispensed with.

F. T. ROMBERGER (Lafayette): I second the motion.

KARL RUDDELL: All in favor say "aye."

HOUSE: Aye.

KARL RUDDELL: Contrary, "no." (No response) Carried.

T. A. HENDRICKS: Are there any eminent guests here? Does anyone want to introduce anybody here? Is Mr. Sandberg of the American Medical Association here? Is Dr. Rovenstine here? Dr. Flood of New York? Dr. Scott of Cleveland? Dr. Walker of Miami? (No guests were present.)

KARL RUDDELL: Article V of the Constitution gives the A.M.A. delegates and alternates the right to sit in the House of Delegates with the privilege of the floor, but they have no power to vote. All guests and members of the Association are welcome at the meeting.

In accordance with Chapter IX, Section 1, of the By-Laws of the Association, reference committees have been appointed and are published in the October JOURNAL and in the Handbook, pages 134 and 135. These committees are to serve during the session at which they are appointed.

These reference committees should not be confused with the all-year 'round standing committees. To these committees shall be referred all reports,

resolutions and measures, presented to the House of Delegates at this session, except such matters as properly come before the Council, and the recommendations of these committees shall be submitted at the next meeting of the House of Delegates which, unless decided differently, will be held Thursday morning, October 31, for acceptance in the original or modified form, or for rejection.

As last year, in addition to the regular ten reference committees provided for in the By-Laws, I am appointing a special reference committee on Health Insurance to which will be referred all reports and matters pertaining to that subject.

Each committee consists of 5 members; the first member named to be chairman of the committee.

T. A. HENDRICKS: Dr. Ruddell states that it is his desire that the men stand as their names are called:

Sections and Section Work

J. E. Ferrell, Fortville (Hancock), Chairman
M. F. Boulden, Frankfort (Clinton)
G. H. Kamman, Seymour (Jackson)
H. H. Ward, Coalmont (Clay)
A. A. Thompson, Tyner (Marshall)

Will those men stand all together, as members of the Committee, so Dr. Ferrell can see who you are in order that he can call you together at the end of this meeting?

Rules and Order of Business

A. E. Stinson, Rochester (Fulton), Chairman
Carl Clark, Oakland City (Gibson)
H. S. McKee, Greensburg (Decatur)
P. T. Holland, Bloomington (Monroe)
E. F. Boggs, Indianapolis (Marion)

Medical Education and Hospitals

J. T. Oliphant, Farmersburg (Sullivan), Chairman
Walter P. Morton, Indianapolis (Marion)
Robert G. Harkness, Terre Haute (Vigo)
C. V. Rozelle, Anderson (Madison)
G. M. Rosenheimer, South Bend (St. Joseph)

Public Policy and Legislation

E. O. Asher, New Augusta (Marion), Chairman
Paul Garber, South Whitley (Whitley)
Oran A. Province, Franklin (Johnson)
Russell W. Lavengood, Marion (Grant)
Minor Miller, Evansville (Vanderburgh)

Publicity

William C. Wright, Fort Wayne (Allen), Chairman
W. M Stout, Newcastle (Henry)
R. M. Anderson, Vincennes (Knox)
B. W. Egan, Logansport (Cass)
Marshall Varble, Jeffersonville (Clark)

Hygiene and Public Health

M. C. Pitkin, Martinsville (Morgan), Chairman
J. S. Robison, Winchester (Randolph)
R. D. Spindler, Milroy (Rush)
Erwin Blackburn, South Bend (St. Joseph)
W. D. Inlow, Shelbyville (Shelby)

Amendments to Constitution and By-Laws

H. C. Metcalf, Connersville (Fayette-Franklin), Chairman
C. G. Kern, Lebanon (Boone)
C. F. Carney, Delphi (Carroll)
T. W. Oberlin, Hammond (Lake)
Maurice Kahler, Indianapolis (Marion)

Reports of Officers

A. C. Yoder, Goshen (Elkhart), Chairman
T. Z. Ball, Crawfordsville (Montgomery)
J. O. Ritchey, Indianapolis (Marion)
E. E. Shrock, Amboy (Miami)
F. E. Keeling, Portland (Jay)

Committee on Credentials

W. F. Carver, Albion (Noble), Chairman
Will Thompson, Liberty (Wayne-Union)
J. W. Bowers, Fort Wayne (Allen)
Walter Kelly, Indianapolis (Marion)
W. E. Amy, Corydon (Harrison)

Committee on Miscellaneous Business

Clay A. Ball, Muncie (Delaware-Blackford), Chairman
Claude Paynter, Salem (Washington)
O. G. Brubaker, North Manchester (Wabash)
C. R. Pettibone, Crown Point (Lake)
Gordon A. Thomas, Lafayette (Tippecanoe)

Special Committee on Health Insurance

F. S. Crockett, Lafayette (Tippecanoe), Chairman
Herman M. Baker, Evansville (Vanderburgh)
C. M. Jones, Whiting (Lake)
George Dillinger, French Lick (Orange)
Jon N. Kelly, LaPorte (LaPorte)

Dr. Baker is here but is attending a meeting of the Editorial Board and will be here in a few minutes. Dr. Ruddell desires to appoint Dr. Jones of Lake County as acting chairman until Dr. Crockett, the regularly appointed chairman, comes. (Dr. Crockett arrived at this time.)

These Committees should organize immediately after adjournment of the House; time will be given at the conclusion of this meeting to announce from the floor the place of meeting. Each Reference Committee Chairman at the conclusion of this meeting should turn over to the Executive Secretary a memorandum giving the time and place of his Committee meeting in order that this information may be placed on the bulletin board at the Registration Desk.

KARL RUDDELL: Most of the reports of the Officers and Committees have been printed in THE JOURNAL and the Handbook of the House of Delegates, but each officer and committee chairman will receive five minutes to make any additions or explanations of the reports already published.

We will now have the address of Dr. Mitchell.

A. M. MITCHELL: Mr. President, gentlemen of the House of Delegates: At this time I don't see where I can make very much of an address because of the changing conditions under the national defense program, the political situation, and the fact that the legislature is going to meet this next year. I have only one thing to say and that is this: The medical profession in Indiana should stand together in all things that pertain to the medical profession, and any little petty differences they might have on any subject should be thrown away, because if we ever need to be united and act as one, it certainly will be within the next year. Thank you. (Applause.)

KARL RUDDELL: Miss Kribs will be available to type the reports of the reference committees; all Chairmen should have their reports typed before the second meeting of the House of Delegates.

We will now have the report of the Executive Secretary. Have you a supplemental report?

T. A. HENDRICKS: I have nothing to add, Mr. President, to the report of the Executive Secretary

as printed in the Handbook and which appeared in THE JOURNAL.

KARL RUDDELL: The report will be referred to the Committee on Reports of Officers. The report of the Treasurer—have you any supplemental report, Dr. Weyerbacher?

A. F. WEYERBACHER: I have nothing further to add.

KARL RUDDELL: The report will be referred to the Committee on Reports of Officers. The report of the Chairman of the Council—is there a supplemental report, Dr. Austin? (Dr. Austin was not present.)

The reports of the Standing Committees and the Special Committees are printed in the October issue of THE JOURNAL and in the Handbook of the House of Delegates, but each chairman will receive five minutes in which to make any additions or supplemental reports.

The Committee on Credentials—Dr. Carver, have you a supplemental report?

W. F. CARVER: Nothing to add to what has been printed in THE JOURNAL.

KARL RUDDELL: Your Report will be referred to the Reference Committee on Credentials. The Executive Committee, Dr. Nafe.

C. A. NAFE (Indianapolis): The Executive Committee would like to file a supplementary report. Mr. President, members of the House of Delegates, Dr. Ruddell. At this time I would like to ask that the House of Delegates go into executive session because of the nature of this supplemental report.

KARL RUDDELL: If it is the pleasure of the House, the House of Delegates will go into executive session. I will entertain a motion to that effect.

E. O. ASHER: I so move, Mr. President.

WALTER KELLY: I second the motion.

KARL RUDDELL: All in favor say "aye."

HOUSE: Aye.

KARL RUDDELL: Carried. Dr. Carver, will you see that the audience is limited to those who are properly eligible. However, perhaps it is all right for everybody to stay except those who are not doctors.

C. A. NAFE (Indianapolis): The Executive Committee at this time wishes first to commend the very efficient manner in which the headquarters' office has conducted its part of the medical program during the year and to call to your attention the fact that they have had an awful lot of work thrown upon them, particularly since this Conscription Act and the attempt to get these examining boards and appeal boards which the Governor has asked that the state society recommend.

You will note that the Report of the Committee is on pages 29 to 46 inclusive, and we want to call attention to two things in that committee report. First, the Executive Committee hopes that the House of Delegates will go on record definitely as to how far it desires the State Medical Association to go, not only in this matter of group hospitalization plans, but in regard to legislation which will create medical service plans in this state. The Committee hopes that the House of Delegates will define very definitely at French Lick its desires in this matter.

KARL RUDDELL: Dr. Nafe's report will be referred to the Committee on Reports of Officers, except pages 34 to 36 concerning Health Insurance which will be referred to the Special Committee for the Study of Health Insurance.

Dr. Dillinger, on the Committee on Arrangements, I expect you have some announcements to make.

GEORGE DILLINGER: Mr. Chairman, at 6:30 this evening, I want you all to assemble in the lobby of the hotel; you will be directed to the barbecue from there. I think we have no other announcement at the present time.

KARL RUDDELL: Dr. Dillinger's report will be referred to the Committee on Miscellaneous Business. The report of the Committee on Scientific Work—Dr. Moore, Chairman. Is there a supplemental report? If not, it will be referred to the reference committee on Sections and Section Work. The report of the Public Policy and Legislation Committee, Dr. Beatty.

N. M. BEATTY (Indianapolis): Some several years ago, this House approved a resolution which empowered the Woman's Auxiliary of this Association to go into the various counties and form local Auxiliary units. At that time, as chairman of the Legislative Committee, I advocated that particular thing. I am happy to say at this time that the many new Auxiliary units that have been formed—some of which have done very admirable work in the way of spreading proper, intelligent information about medicine—I would say to you this: Those counties which do not have Auxiliaries, I believe, would find it very worthwhile to consider such a movement; and if you do, the first step, I believe—and very carefully so—is that each county society appoint an advisory committee to work and function with and approve all activities of that Auxiliary before it begins to function. In the counties in which that is being done, some very excellent work has been done, particularly in connection with the various women's clubs, farm bureau auxiliaries, parent-teacher associations, Legion auxiliaries, labor movement auxiliaries and what-not.

One of the other points that I particularly would like to call to your attention is the activities of the Interprofessional Health Council. Some several years ago we woke up to the fact that in legislative channels we had some 3,000 members of this association; 3,000 in a State of some 3,000,000 is not many; we needed numerical strength from a legislative point of view as well as from the standpoint of general public policy, so at the instigation of some of our members, particularly Dr. Crockett and Dr. Romberger and many others, there was formed an Interprofessional Health Council which consists of representatives of this Association, the State Dental Association, the State

Nurses' Association, the State Hospital Association and a State Druggists' Group. Now this group has had a number of meetings; for the last two years, I have had the opportunity of being its Legislative Chairman also; and during the last session it was a great service to us to have the help, the influence, of these other groups in working with us.

For some years, there have been many questions come up in which there has been some friction between the different health professions, particularly in connection with the use and control of various drugs. During this last year there has been appointed a number of sub-committees to study this drug problem, one in connection with the carrying out of a resolution passed by this House in control of barbiturates, another one in control of drastic poisons and what-not. There is even one Committee that is studying the entire question of agricultural chemicals and the quack things that are sold in that line. All of these are related problems, and in that connection it has been very helpful to us to have a very close working alliance with these other health professions, also the veterinarians, and through the veterinarians the Farm Bureau and other very potent policy groups.

KARL RUDDELL: The House now rises from executive session. Dr. Beatty's report will be referred to the Committee on Public Policy and Legislation. The Committee on the Bureau of Publicity, Dr. Wishard; I believe there is a supplemental report to be read. Is Dr. Thompson here?

T. A. HENDRICKS: As Dr. Wishard, the chairman, and Dr. Gastineau and Dr. Thompson, members of the Bureau of Publicity, are not here, I will read the supplementary report of the Bureau of Publicity to the House of Delegates:

Gentlemen: From the beginning the Bureau of Publicity has recommended the importance of all publicity being absolutely impersonal. At its inception the Bureau adopted a provision that anyone who attempted in any way to use the Bureau for his own personal publicity should have his offerings or services rejected. All publications of the Bureau have been impersonal and the Bureau has been careful to solicit contributions only from leading physicians who are recognized in their special lines. In each of these cases these men have gladly rendered services without any thought of their names appearing in the public press and the Bureau takes this opportunity to thank each of them. Respectfully submitted:

WILLIAM N. WISHARD, M.D., *Chairman*
F. M. GASTINEAU, M.D.
C. F. THOMPSON, M.D.

KARL RUDDELL: Dr. Wishard's report will be referred to the Committee on Publicity.

The Civic and Industrial Relations Committee, Dr. Knoefel. Is there a supplemental report? If not, the report will be referred to the Committee on Public Policy and Legislation.

The Committee on Medical Education and Hospitals, Dr. Herman Baker. No supplemental report; the report will be referred to the Committee on Medical Education and Hospitals.

The Committee on Public Relations, Dr. Garshwiler, chairman. If there is no supplemental report, it will be refererd to the Committee on Public Policy and Legislation. The JOURNAL Publication Committee, Dr. Shanklin. Do you have anything to say, Dr. Shanklin?

E. M. SHANKLIN (Hammond): No report.

KARL RUDDELL: If not, the report will be referred to the Committee on Reports of Officers.

The Committee on Necrology and Historian, the report of Dr. Maple, I should say. Is there a further report? If not, it will be referred to the Committee on Miscellaneous Business.

The Secretaries Conference, Dr. Hane, chairman. Is there a supplemental report? If not, it will be referred to the Committee on Miscellaneous Business.

The Committee on Veterans' Affairs, Dr. Crampton, chairman. This Report will be referred to the Committee on Miscellaneous Business.

The Permanent Study Committee on Health Insurance and the National Medical Situation, Dr. Forster. Do you have a report, Dr. Forster?

N. K. FORSTER (Hammond): Mr. President, members of the House of Delegates: Due to a misunderstanding, our original report contains the statement that at the meeting of the House of Delegates of the American Medical Association in New York a resolution was adopted appointing a committee to make a study of the problem of aid to needy members of the profession and the establishment of a national fund for this purpose, and empowering them to appoint a subcommittee of three from each state association to carry on similar studies in their respective states.

It was our understanding that this resolution was passed. However, we find that the resolution was not adopted because the reference committee which considered it brought in an adverse recommendation. Consequently our recommendation upholding what we presumed to be favorable action by the House of Delegates of the American Medical Association cannot apply.

We do, however, indorse the idea and we recommend the appointment of a committee to study the question of the advisability of adopting such a plan in Indiana and in the event of favorable findings to draw up and present a suitable plan at the next regular annual meeting of the House of Delegates of the Indiana State Medical Association.

W. U. KENNEDY
J. M. FLEMING
A. C. YODER
ERNEST RUPEL
M. V. KAHLER
N. K. FORSTER

KARL RUDDELL: Dr. Forster's regular report is found in THE JOURNAL and will be referred to the Committee on Public Policy and Legislation and the supplemental report will be referred to the Special Reference Committee on Health Insurance. Only the first seven recommendations that appeared in THE JOURNAL, I should say, so that you will kindly take note.

The Committee on the Study of High School Athletics. Dr. Little, Chairman. If there is no supplemental report, it will be referred to the Committee on Hygiene and Public Health.

The Committee on Mental Health, Dr. Larue Carter. His report will be referred to the Committee on Hygiene and Public Health.

The Committee on State Fair, Dr. Russell Sage, chairman. This will be referred to the Committee on Publicity.

Committee on Prevention of Traffic Accidents, Dr. Hadley, chairman; this will be referred to the Committee on Hygiene and Public Health.

The State Board of Health Liaison Committee to Deal with Social Security Act, Dr. Asher. Do you have a supplemental report? If not, it will be referred to the Committee on Public Policy and Legislation.

The Sub-Committee to Study Maternal Morbidity and Mortality Rates for Indiana, Dr. Beckman; this is referred to the Committee on Public Policy and Legislation.

The Auditing Committee. Is there a member of the Auditing Committee present? If there is no supplemental report, it will be referred to the Council.

The Liaison Committee with Indiana Crippled Children's Bureau, Dr. Barclay, Chairman.

I. C. BARCLAY (Evansville): Mr. President, members of the House of Delegates, in addition to the already published report of the activities of this division, it gives me a great amount of pleasure to make a complete report of the activities of the Crippled Children's Division concerning the poliomyelitis situation in the State of Indiana.

To date there have been 45 pediatric consultation services rendered in acute or suspected acute cases of anterior poliomyelitis. The costs of these pediatric consultations have been paid by the Division of Services for Crippled Children. It is outstanding to note that out of over 600 cases reported to the State Board of Health, 45 have received consultation service through the activities of this division. It should also be noted that these consultative services were rendered in the homes of the patients.

The orthopedic nursing service of this division has called on a total number of 83 cases afflicted with polio. The nursing staff of the division has rendered numerous consultative services to local nurses regarding polio cases, and has given numerous individual and group demonstrations as to necessary nursing service for children afflicted with polio. An outstanding activity of the nursing service of this division was a continuous nursing demonstration concerning polio patients which was presented at the Indiana State Nurses' Annual Meeting which was held in Evansville during the week of October 14, 1940.

The demand for the service of physical therapists relative to the care of polio patients has been exceptionally heavy. An unduplicated total of 135 children afflicted with polio have been seen by the physical therapists of the staff of this division.

I would like to call to your attention that the Division of Services for Crippled Children has set up and is operating at this Convention a scientific exhibit concerning nursing care and physical therapy procedures relative to children afflicted with polio. Your attention is called to this exhibit in the hope that you will plan to attend in order that you may see the splendid work which this division is sponsoring.

I may add that the exhibit is on your right of the Convention Hall as you leave this room. Thank you.

KARL RUDDELL: Thank you, Dr. Barclay. The Report of Dr. Barclay will be referred to the Committee on Public Policy and Legislation.

The Committee for the Control of Cancer, Drs. Stayton and Geider. If there is no supplemental report, the report will be referred to the Committee on Hygiene and Public Health.

The Committee for the Control of Venereal Diseases, Dr. F. R. Nicholas Carter. With no supplemental report, it will be referred to the Committee on Hygiene and Public Health.

Committee on Industrial Health, Dr. Rozelle, chairman.

C. V. ROZELLE (Anderson): In addition to the report which was published on page 109 of the Handbook, there are two additions and explanations which I would like to make. First, on page 111—"If possible, have one or two physicians in the five members of the Industrial Board." Heretofore it has been practically impossible to do this because of the amount of time that would be devoted to this work and the compensation for the same. However, this is regarded by this committee as a very important part of this program and if it is at all possible I think we should make some arrangements to have at least one or two members of this Industrial Board, which consists of five members, be physicians.

Another recommendation was made that a liaison committee be appointed by the National Manufacturer's Association to work with that body and the State Medical Association on this program of Industrial Health. They have called a meeting of this committee tomorrow morning at breakfast in the Blue Room. If any of you who are not delegates or if any of your constituents have suggestions to bring before the committee, will you let us have them at that time? Thank you.

KARL RUDDELL: Thank you, Doctor. I think, Dr. Rozelle, that we should have your supplemental report so that it might be referred to the Committee on Hygiene and Public Health. Please see that that Committee gets your supplemental report.

The report of the Committee to Study Cultists and Irregular Practitioners, Dr. Ellison, chairman. If there is no supplemental report, it will be referred to the Committee on Public Policy and Legislation.

The Committee on Indiana Inter-Professional Health Council, Dr. Crockett.

F. S. CROCKETT (Lafayette): There is no supplemental report.

KARL RUDDELL: Then it will be referred to the Reference Committee on Miscellaneous Business.

The Anti-Tuberculosis Committee, Dr. Stygall, chairman. If there is no supplemental report, it will be referred to the Reference Committee on Hygiene and Public Health.

The Committee on Conservation of Vision, Dr. Holland. No supplemental report? Then it will be referred to the Committee on Hygiene and Pub ic Health.

The Pneumonia Committee, Dr. C. J. Clark. This will be referred to the Committee on Hygiene and Public Health.

The Liaison Committee with the Indiana State Department of Public Welfare, Dr. Herman Baker. If the doctor is present—there is no printed report. I guess there is no report to be referred.

Director of Research on Sickness Insurance, Dr. W. U. Kennedy of Newcastle. Is Dr. Kennedy present? His report will be referred to the committee on Health Insurance.

The M-Day Committee, Dr. Bird, chairman. Dr. Bird, do you have a supplemental report?

C. R. BIRD (Indianapolis): Dr. Ruddell, members of the House of Delegates, the local county societies and the councilors have given 100% support to this Committee, and we wish to thank them.

The recommendations made by them for the designated examiners and district advisory board members were accepted. That meant a compilation of over some 400 names throughout the state. All appointments made in this state emanated from local units which is the democratic way of doing things. The Governor left the question of appointees entirely up to the medical profession, hence the quacks, politicians and other objectionable members were not appointed on these boards, as happened in some other states.

All selective service examiners are now called "designated" examiners not "examiner and alternate."

Now there are M-Day Committees appointed in 62 counties, or about 80% complete. Every county must have an M-Day Committee. At the time the report was written for THE JOURNAL, there were 33 county M-Day committees organized.

Approximately 90% of the doctors of the state have accomplished and forwarded to the A.M.A. headquarters the questionnaire. We hope to have this 100% very shortly. Any who have not filled out a questionnaire will find them at the registration desk. On September 18th, Indiana stood 67 1/10% complete. Today it is about 90%, as I said. I think the House is to be congratulated upon its foresight in providing for the appointment of an M-Day Committee which started the ball rolling for a nation-wide movement of similar import. It also placed Indiana in the vanguard.

Interest in the subject of preparedness is evinced by the number of requests for discussions before medical and civic organizations.

Opportunity must be taken to thank Tommy Hendricks and the personnel of his office for the cooperative teamwork and indefatigable effort to cope with the enormous demands upon their time and energy. Literally hundreds, running into the thousands, of letters have gone out; and the mimeographed words that have gone out run into the hundreds of thousands; the mailing, addressing, mimeographing and the work incident to the M-Day Committee has compelled him to add two additional personnel to his office. I think nobody can know how much they have done; I don't believe the medical profession of Indiana fully appreciates the state executive offices.

I stand ready to answer any questions by the Reference Committee.

KARL RUDDELL: Dr. Bird, will you file your supplemental report with the Committee on Miscellaneous Business. Are there any questions?

Is Dr. Wiseman here? The Credentials Committee wants to see Dr. Wiseman.

The Committee on Physical Therapy, Dr. E. B. Libbert, chairman. Is there any supplemental report, Dr. Libbert? If not, your report will be referred to the Reference Committee on Medical Education and Hospitals.

The Committee on Medical Relief, Dr. J. S. Leffel, chairman. Do you have your report, Dr. Leffel?

J. S. LEFFEL (Connersville): Mr. Chairman, gentlemen: The Medical Relief Committee was appointed in December, 1939, to study the problems incident to the care of the indigent and medically indigent. These problems present many phases and solicit the interest, either directly or indirectly, of almost every citizen. Newspaper clippings have been collected which make it very obvious that the press is interested. The press is interested because taxpayers know that medical and hospital care is now the largest single item of poor relief except food. It has increased almost 60% since 1933 even though economic conditions have improved. Because of this expense and the publicity it receives, business men have met in certain localities and have through the pressure of their groups set up a different plan for the care of the poor—usually contract practice. In this instance, they have disturbed the age old custom of patient-physician relationship.

Because of this expense and this publicity, groups

interested in taxation—Farm Bureaus, Taxpayers' Associations, Chambers of Commerce and others—are insisting that the poor laws be changed in Indiana. Not only is this true in Indiana and other states, but I am convinced that it is the driving wedge that is behind all legislation for the creation of national socialization of medicine and some form of compulsory health insurance. Because of this expense and this publicity, some few groups of doctors have found it profitable to encourage indigency. Because of this expense and publicity, the 1016 township trustees are very much interested in this problem. The various groups of organized social workers have taken this matter into consideration on numerous occasions during the past year; and there have been suggestions that they replace the position of the trustee as overseer of the poor. Thus it is obvious that this problem of medical indigency is the direct or indirect concern of every individual in the State.

It is interesting to inquire into the reason why medical relief gets greater as economic conditions improve. Some would say it is the direct fault of the trustee, while others would say it is the fault of the medical profession. This is only natural because the one group pays and the other group receives. Our studies and observations indicate that neither of these groups is generally at fault. There are some few exceptions. The reason for this increase is a world-wide trend; it is a trend in social, industrial, economical, political and governmental affairs, whereby there is a group aggression which insists on the devaluation of individual responsibility and self-reliance, and depends on an all powerful, paternalistic, providential government and its personalities for everything—from poor assistance to the blessings of a Divine Providence.

To stop or even check a world-wide trend by state legislation would test the ingenuity of a Gladstone. In fact, legislation does not stop trends; it follows trends. Medical relief is no longer thought of as something temporary; it is permanent. The desire of the indigent and the medically indigent is to become a part of a group receiving government assistance rather than to be a responsible, self-reliant individual. It appears at times that our public school system encourages group aggression, for example, the medical care of university students.

The complex nature of the problem prevented your Committee from arriving at any specific plan which would provide adequate medical care of the indigent. We can, however, make some recommendations and suggest some guiding principles.

(1) We recommend that local medical societies and individual members be urged to cooperate with trustees and other lay groups for a better treatment of the indigent.

(2) We recommend that the discussion of fees be left entirely with local societies except where overlapping occurs, in which case a joint committee might be useful.

(3) We recommend that local physicians acquaint themselves with problems of local taxation and the expenditure of such funds.

(4) We recommend, in accordance with the platform of the American Medical Association, that the profession generally accept the obligation of caring for all the people.

Thank you. (Applause.)

KARL RUDDELL: Dr. Leffel's report will be referred to the Committee on Public Policy and Legislation.

The Report of the Delegates to the A.M.A. Is Dr. Hamer here? Are there other delegates here? Dr. Hamer, would you care to make any supplemental report?

H. G. HAMER (Indianapolis): I have no report to make other than that published in THE JOURNAL.

KARL RUDDELL: It will be referred to the Reference Committee on Reports of Officers.

All the communications that have been received have been taken care of by the various committees which demonstrates the efficiency of these committees.

Are there any memorials to be presented at this time? Any memorial resolutions?

Then we come to "Unfinished Business": Changes in the Constitution to come before the House of Delegates.

A resolution introduced by Dr. Ira Perry at the 1938 Session:

BE IT RESOLVED that Section 3 of Article IX of the Constitution be amended as follows: By striking out the following words: "No delegate shall be eligible to any office named in the preceding section, except that of Councilor."

This will be referred to the Reference Committee on Amendments to the Constitution and By-Laws.

Another change suggested is from the report of the Reference Committee on Amendments to the Constitution and By-Laws of the 1938 Meeting of the House of Delegates, published in THE JOURNAL, page 657, November, 1938:

"Also, in order to conform to the Constitution and By-Laws of the American Medical Association, we recommend this change in Article IV, Section 5, of our Constitution to read: 'Who has attained the age of sixty-five years'—this instead of seventy-five years as is now provided for."

This change will be referred to the Reference Committee on Amendments to the Constitution and By-Laws.

Another change in the Constitution is taking out the word "material," from the report of the Reference Committee on Amendments to the Constitution and By-Laws, 1939 Meeting of the House of Delegates, published in THE JOURNAL, page 666, November, 1939:

"That Article II of the Constitution of the Indiana State Medical Association be amended by striking out the words 'to guard and foster the material interests of its members and'."

That will be referred to the Reference Committee on Amendments to the Constitution and By-Laws.

Changes in By-Laws: Change in Section 4, Chapter VII, of the By-Laws, striking out the word "material." This section then would read as follows:

"The Council shall, in connection with the House of Delegates, consider and advise as to the interests of the profession and of the public in those important matters wherein it is dependent upon the profession and shall use its influence to secure and enforce all proper medical and public health legislation and to diffuse popular information in relation thereto."

That will be referred to the Reference Committee on Amendments to the Constitution and By-Laws.

A resolution in regard to joint medical societies having a delegate for each county, prepared by the Executive Committee in 1939 and deferred by the Reference Committee on Amendments to the Constitution and By-Laws for another year's study and presentation at the 1940 meeting of the House of Delegates:

"BE IT RESOLVED that Chapter IV, Section 2, of the By-Laws of the Indiana State Medical Association be amended by striking out the period after the word 'delegate', in line 8 of the said Section and substituting a comma therefor, and then by adding after the comma the following:

'except that where a component society is made up of physicians of more than one county, each county shall be entitled to at least one delegate to be selected by the physicians residing in such county'."

That shall be referred to the Reference Committee on Amendments to the Constitution and By-Laws.

Now we are ready for "New Business."

There has been a complaint from the Scientific Work Committee that our Delegates' Meeting taking place at 7 o'clock on Thursday morning detracts very materially from the Scientific Session on Thursday. They say that we have speakers from all parts of the country, that the delegates and officers of the Society usually are unable to be present, and they ask that something be done about changing that time. Is there some discussion about that?

WALTER KELLY (Indianapolis): I'd like to offer the following motion: That the House of Delegates hold a meeting at 4 p. m. on Wednesday, October 30th, this meeting to be adjourned at 6 p. m. At this meeting, committee reports should be taken up and as much of this work be finished as possible in order that the breakfast meeting of October 31st may be shortened. I have investigated the Constitution and that can be done, and it will shorten very materially our breakfast meeting so it will not go beyond the time when our scientific meetings are held.

DELEGATE: Is this Constitutional?

WALTER KELLY: Yes, this is Constitutional. The Constitution states that the House of Delegates shall be held in a manner that interferes as little as possible. Most of the scientific meetings on Wednesday afternoon run until about five. I wish to limit the time so that we will have only a two hour session. I think many of our committee reports could be taken up and properly discussed; that is the reason for my motion.

KARL RUDDELL: Before I ask for a second, I might say that this was taken up before—as to whether we should have a breakfast or a luncheon meeting, and Mr. Hendricks sent out cards as to their preference. Those in favor of a luncheon meeting were 74, and those in favor of a breakfast meeting were 30; those were the answers received by the secretary's office. There was no preference stated by four. I shall ask for a second to Dr. Kelly's motion.

M. R. LOHMAN (Fort Wayne): I second the motion.

KARL RUDDELL: The House is open to discussion on Dr. Kelly's motion.

(Dr. Kelly re-read the motion.)

F. T. ROMBERGER (Lafayette): I would like to ask when the election of officers for the ensuing year will be held.

KARL RUDDELL: That must come on Thursday morning, because the Constitution provides that that shall be the first order of business at the last meeting of the House of Delegates. We may meet Wednesday afternoon and adjourn, then Wednesday afternoon's meeting is the last meeting of the House of Delegates.

T. A. HENDRICKS: Why doesn't the House recess? Dr. Romberger, the By-laws provide that there may be additional meetings of the House of Delegates which will not interfere insofar as possible with the scientific procedures, and that does not change, I believe, the Thursday meeting.

WALTER KELLY: I just stated particularly that the committee reports be taken up—and that is the only business at that meeting on Wednesday afternoon.

KARL RUDDELL: Will the Reference Committees have time to complete their work?

WALTER KELLY: The reports which are not complete can go over until the next morning.

DELEGATE: Mr. President, is that just for this session?

KARL RUDDELL: I don't know.

J. H. WEINSTEIN (Terre Haute): Mr. President, would it not be in order to recess this session until that time and call it a part of this session?

KARL RUDDELL: Before we go on, I will read from the Constitution and By-Laws, Chapter IV, Section 1: "The House of Delegates shall meet the day before or during that fixed as the first day of the scientific meeting of the Annual Session. It may adjourn from time to time"—that's in line with your idea—"as may be necessary to complete its business provided that its hours conflict as little as possible with the general or section meetings. It shall meet on the morning of the last day of the Annual Session for the election of officers for the

ensuing year and for the completion of any business previously introduced."

F. T. ROMBERGER: I wish to commend the doctor for this idea; let tomorrow's session be an adjourned meeting of this session and have the last session as heretofore.

KARL RUDDELL: Is there any further discussion on Dr. Kelly's motion with the amendment for adjournment of this session? All in favor say "aye."

HOUSE: Aye.

KARL RUDDELL: Contrary, "no." (No response.) We will have to announce the meeting place later because this room will not be available. I suppose it will be on the Bulletin Board.

Is there any other new business?

M. R. LOHMAN (Fort Wayne): I want to present this motion: The Fort Wayne Medical Society passed a resolution waiving the dues of those doctors called to the colors. I now move that the Indiana State Medical Association shall remit the dues of those doctors called to the colors of our Government for the duration of that service.

KARL RUDDELL: You make that as a motion? Is there a second?

WILLIAM WEAVER (New Albany): I second the motion.

KARL RUDDELL: That motion will have to be referred to the Committee on Miscellaneous Business.

Is there any other new business? Dr. Boggs.

E. F. BOGGS (Indianapolis): Mr. President: The problem of absentee physicians who will be called in the National Guard, the Army, the Marine Corps and the Reserve, has been one of grave concern to the M-Day Committee and the Medical Examiners Board of the Selective Service Administration. On this account, Dr. Bird of the M-Day Committee and other members of the Board asked that a resolution be formulated for presentation to this Society on October 21st. The text of that resolution which I will change to a recommendation is as follows:

Article 1. Whe.eas, the world emergency necessitates the immediate action of the Federal Government in calling physicians to service with the armed forces of the nation, many of our fellow practitioners may be summoned in the near future.

Article 2. Whereas, in the last World War, many loyal physicians responded to the call of the Nation, thereby forfeiting all immediate security of peaceful pursuits, return to civil practice brought the stark realities of a lost practice and the task of building anew against the effects of protracted absence and human forgetfulness,

Article 3. Therefore, the Military Relations Committee of the Indianapolis Medical Society seeks, insofar as it is able, to strive for a more equitable recognition and protection of fellow physicians who, by force of universal circumstances, give services to the greater security of us all.

Article 4. Be It Resolved, that any member of the Indiana State Medical Association who is called to service with the armed forces of the land, be privileged to obtain the fraternal support of the profession as follows:

Section 1. Any member of the Indiana State Medical Association on receiving a call to service by our Government for duties away from his sphere of practice, may thereon advise his clientele by word or written communication of his reasons for absence.

Section 2. Any member of the Indiana State Medical Association may advise his patients to call, during his absence, fellow physicians of his own designation.

Section 3. Any fellow physician on receiving the approval of his colleague and the patient referred therefrom is obliged to pursue under his manifest moral obligations to our State Society, the following professional conduct:

Sub-Section 1. Any patient referred by the absentee physician is to be advised that he receives services from the referred doctor only during the necessary absence of his regular doctor.

Sub-Section 2. That upon return of his regular doctor, the patient is to return likewise. That should the patient on his own volition decide not to so return, he shall not continue with the referred doctor but will make a choice of a third physician entirely on his own decision. Patients will be discouraged from doing this insofar as it is tactfully possible to advise.

Sub-Section 3. Fellow physicians caring for an absentee practice shall keep proper clinical and financial records of patients, which records will be immediately returned to the absentee upon his return.

Sub-Section 4. That through a written agreement with the absentee, the colleague designated in full confidence to care for his practice shall scrupulously desposit all revenues to the credit of the absentee and thereafter make settlement in terms previously agreed upon. Should the absentee not survive, due settlement may be made with his beneficiary or beneficiaries designated by the absentee prior to entrance in military service.

Sub-Section 5. Should any physician as a member of the Indiana State Medical Association be pursuing practice involving compensation, insurance, fraternal orders, civil government appointment or any form of practice vaguely removed from strictly private practice, obligations of the colleague assuming these duties still obtain. This colleague is morally obligated to prevail upon duly responsible officials, corporative groups or civil officers to loyally return the appointment of the absentee physician to the position which he formerly occupied.

Article 5. Whereas the Military Relations Committee of the Indianapolis Medical Society believes implicitly in the devotion to country and inherent honor and decency of our fellow physicians, we recommend that in this great hour of devotion to a common cause that the above obligations once assumed are but small sacrifices when compared to those which many will have to undergo. Furthermore, we believe that the future welfare of ourselves and community will be materially benefited by the loyal cooperation of each physician who experiences in a less dramatic way each day as he serves as an American doctor and citizen.

The delegates of the Marion County Medical Society and Council presented these resolutions to Dr. Larue Carter, who, in turn, presented them to the Society to approve this resolution as a recommendation to the State Society to be handed back to each local society for consideration.

KARL RUDDELL: Dr. Boggs, will you give your resolution to Miss Kribs? Dr. Boggs' recommendation will be referred to the Committee on Miscellaneous Business.

Dr. Oberlin—

T. W. OBERLIN (Hammond): At its meeting on October 10, 1940, the Lake County Medical Society voted to have the following resolution presented to the House of Delegates of the Indiana State Medical Association:

Whereas, the Indiana Beauty Culturist Law states that the applicant shall furnish a certificate from a licensed physician that shall have been selected from a list of physicians furnished by the Board of Examiners, showing that the applicant is free from any contagious, infectious

or communicable disease, which shall include a Wassermann test, and so forth, and

Whereas, this Section violates the stand of organized medicine taken in the best interests of the patient, that patients be permitted a free choice of physician along with freedom from the interference of political or governmental units in the relation of family physician and patient, and

Whereas, beauticians have complained to their physicians regarding the necessity of going to a physician who is a complete stranger for the intimate examination required for this certification, and

Whereas, another Examining Board of the same State—the Board of Medical Registration and Examination—has certified all Indiana licensed physicians as competent to make such examinations and sign such certificates, and

Whereas, a similar condition exists regarding the examination of barbers,

Therefore, Be It Resolved, that the Indiana State Medical Association actively oppose and attempt to accomplish a change in the practice of these Examining Boards which prevent applicants a choice of examining physicians and which refuses to accept certificates signed by Indiana licensed physicians who have not been included on the list of physicians distributed by these Boards; and

Be It Further Resolved, that if the Boards believe that any list is necessary, a list of ethical members of the profession shall be supplied by the county medical societies and

Be It Further Resolved, that, failing in the above, the Indiana State Medical Association shall prepare and cause to be presented before the State Legislature an amendment to these laws which will permit the applicant a free choice of Indiana licensed physicians.

KARL RUDDELL: This resolution will be referred to the Committee on Public Policy and Legislation. Any other New Business? Dr. Clark.

CARL CLARK (Oakland City): Mr. President, I wish to introduce a resolution.

The resolution is pertaining to admissions to the university hospitals. At the regular monthly meeting of the Gibson County Medical Society, October 14, 1940, the delegate to the convention of the Indiana State Medical Association was instructed to present the following resolution:

Whereas, House Bill 74, passed by the Indiana State Legislature in 1939, provides for the care of indigent patients of the State of Indiana at the university hospitals, with the cost of that care being shifted from the township to the county of residence; and

Whereas, the township trustees of Indiana are taking advantage of these provisions which shift expense from their budget to the county budget in many instances to the inconvenience of the patient and added expense for medical care,

Therefore, Be It Resolved, that the Indiana State Medical Association in this 1940 Convention declare itself for such changes in House Bill 74 as passed by the Indiana State Legislature in 1939 as will shift the financial responsibility for such care of the indigents back to the townships where such indigents reside, and

Be It Further Resolved, that our Legislative Committee be instructed to sponsor the aforesaid changes in this Bill, that our component county societies are urged to aid in every way possible through contact with local members of the 1941 Legislature.

KARL RUDDELL: Dr. Clark's resolution will be re-referred to the Committee on Public Policy and Legislation. Is there any other New Business?

I would suggest that the committee chairmen call their committees together before they leave and get their assignment from Miss Kribs.

HOUSE OF DELEGATES

(French Lick Session, 1940)

Second Meeting

The second meeting of the House of Delegates, a recessed meeting, was held in the West Dining Room of the French Lick Springs Hotel, French Lick, Indiana, on Wednesday, October 30, 1940, with the president, Dr. Karl R. Ruddell, in the chair. The meeting was called to order at 4:00 p. m.

The signed attendance slips showed the following present:

County	*Delegates*
Allen:	M. R. Lohman, Fort Wayne
Boone:	C. G. Kern, Lebanon
Clay:	H. H. Ward, Coalmont
Daviess-Martin:	S. L. McPherson, Washington
Dearborn-Ohio:	G. H. Hansell, Rising Sun
Decatur:	H. S. McKee, Greensburg
DeKalb:	C. I. Weirich, Butler
Delaware-Blackford:	Clay A. Ball, Muncie
Elkhart:	A. C. Yoder, Goshen
Fayette-Franklin:	Henry C. Metcalf, Connersville
Floyd:	William W. Weaver, New Albany
Fountain-Warren:	J. Carl Freed, Attica
Fulton:	A. E. Stinson, Rochester
Gibson:	Carl M. Clark, Oakland City
Grant:	Russell W. Lavengood, Marion
Greene:	Carl M. Porter, Jasonville
Hancock:	J. E. Ferrell, Fortville
Harrison:	William E. Amy, Corydon
Hendricks:	O. T. Scamahorn, Pittsboro
Henry:	Walter M. Stout, Newcastle
Huntington:	C. S. Black, Warren
Jasper-Newton:	A. R. Kresler, Rensselaer
Jay:	F. E. Keeling, Portland
Johnson:	O. A. Province, Franklin
Kosciusko:	Orville H. Richer, Warsaw
Lake:	C. M. Jones, Whiting
	T. W. Oberlin, Hammond
	C. R. Pettibone, Crown Point
	P. Q. Row, Hammond
LaPorte:	J. N. Kelly, LaPorte
Lawrence:	R. B. Smallwood, Bedford
Madison:	C. V. Rozelle, Anderson
Marion:	E. O. Asher, New Augusta
	Eugene F. Boggs, Indianapolis
	Frank M. Gastineau, Indianapolis
	Maurice V. Kahler, Indianapolis
	W. F. Kelly, Indianapolis
	C. H. McCaskey, Indianapolis
	J. O. Ritchey, Indianapolis
	Lacey L. Shuler, Indianapolis
	O. W. Sicks, Indianapolis
	M. J. Spencer, Indianapolis
Marshall:	A. A. Thompson, Tyner
Miami:	S. D. Malouf, Peru
Monroe:	Philip T. Holland, Bloomington
Montgomery:	T. Z. Ball, Crawfordsville
Morgan:	M. C. Pitkin, Martinsville
Noble:	Walter F. Carver, Albion
Orange:	George Dillinger, French Lick
Parke-Vermillion:	S. C. Darroch, Cayuga
Pike:	T. R. Rice, Petersburg
Porter:	G. R. Douglas, Valparaiso
Randolph:	J. S. Robison, Winchester
St. Joseph:	A. S. Giordano, South Bend
	George M. Rosenheimer, South Bend
Shelby:	W. D. Inlow, Shelbyville
Sullivan:	J. T. Oliphant, Farmersburg
Tippecanoe:	Gordon A. Thomas, Lafayette
	Earl Van Reed, Lafayette
Vanderburgh:	Minor Miller, Evansville

Vigo:	A. W. Cavins, Terre Haute
	E. O. Nay, Terre Haute
Wabash:	C. G. Brubaker, North Manchester
Washington:	Claude B. Paynter, Salem
Wayne-Union:	W. A. Thompson, Liberty
Wells:	Allen C. Nickel, Bluffton
Whitley:	Paul A. Garber, South Whitley

Councilors

Second District:	H. C. Wadsworth, Washington
Third District:	William H. Garner, New Albany
Sixth District:	Samuel Kennedy, Shelbyville
Seventh District:	C. J. Clark, Indianapolis
Ninth District:	Floyd T. Romberger, Lafayette
Tenth District:	J. M. White, Gary
Eleventh District:	Ira E. Perry, North Manchester
Thirteenth District:	Alfred Ellison, South Bend

Past Presidents

Charles S. Bond, Richmond
E. M. Shanklin, Hammond
Charles N. Combs, Terre Haute
G. R. Daniels, Marion
F. S. Crockett, Lafayette
J. H. Weinstein, Terre Haute
R. L. Sensenich, South Bend
Herman M. Baker, Evansville
E. M. VanBuskirk, Fort Wayne

Officers

President—Karl R. Ruddell, Indianapolis
President-Elect—A. M. Mitchell, Terre Haute
Treasurer—A. F. Weyerbacher, Indianapolis
Executive Secretary—T. A. Hendricks, Indianapolis
Delegate to the A.M.A.—D. F. Cameron, Fort Wayne

The secretary read the following resolution on medical preparedness which was received from the Woman's Auxiliary to the Indiana State Medical Association:

Whereas, a national crisis may now endanger our country, and

Whereas, The Indiana State Medical Association in cooperation with the American Medical Association has been especially alert and active in promoting the medical program for military preparedness,

Therefore, Be It Resolved, that the Woman's Auxiliary, in Convention assembled, pledge its continued loyalty and offer all the support that lies within its powers and purposes to the Indiana State Medical Association, and

Be It Further Resolved, that a copy of this resolution be spread upon the records of the Auxiliary, and

Be It Further Resolved, that a copy be sent to The Indiana State Medical Association in Convention assembled.

(Signed) MRS. CHARLES VOYLES,
MRS. GEORGE DILLINGER,
MRS. C. V. ROZELLE.

KARL RUDDELL: This will be referred to the Reference Committee on Miscellaneous Business.

REPORTS OF REFERENCE COMMITTEES

Sections and Section Work

House of Delegates,
Indiana State Medical Association.
Gentlemen:

Your Committee wishes to compliment the complete organization for the fine program which has been provided for the members of the Indiana State Medical Association.

The Chairman of each Section reports an unusual attendance and that great interest has been shown because, they think, of the high quality of the men giving the discourses on the different subjects.

The Committee on Scientific Work needs especial commendation because of the high grade of work they have performed.

(Signed) J. E. FERRELL, *Chairman,*
M. F. BOULDEN,
G. H. KAMMAN,
H. H. WARD,
A. A. THOMPSON.

J. E. FERRELL: Mr. Chairman, I move the adoption of this report.

GEORGE DANIELS: I second the motion.

KARL RUDDELL: You have heard the motion to adopt Dr. Ferrell's report; it has been duly seconded. All in favor signify by saying "aye."

HOUSE: Aye.

KARL RUDDELL: Opposed, "no." (No response.) Carried.

Rules and Order of Business

A. E. STINSON: Gentlemen of the House of Delegates, the Committee has no report to make as no work was assigned to it for consideration.

(Signed) A. E. STINSON, *Chairman,*
CARL CLARK,
H. S. MCKEE,
P. T. HOLLAND,
E. F. BOGGS.

F. S. CROCKETT: Mr. President, I move the adoption of this report.

DELEGATE: Second.

KARL RUDDELL: The motion to adopt the report of the Committee on Rules and Order of Business has been made and duly seconded. All in favor signify by saying "aye."

HOUSE: Aye.

KARL RUDDELL: Opposed, "no." (No response.) So ordered.

Medical Education and Hospitals

J. T. OLIPHANT: Gentlemen of the House of Delegates, we, your Reference Committee, recommend the adoption of the report of the Standing Committee on Medical Education and Hospitals as published in THE JOURNAL.

We further recommend that this Standing Committee give special attention to paragraph 4 of the report of the Committee on Industrial Health and cooperate in providing education of physicians in industrial hygiene through articles in THE JOURNAL, symposia at postgraduate courses, and the inclusion of similar education in industrial medicine and law in the medical school curriculum.

Your Committee feels that this is a matter of extreme importance at this time, because of the rapid growth of industrial medicine and its intimate relationship to the present defense program.

On the report of the Committee on Physical Therapy, your Reference Committee commends their report as published in THE JOURNAL and suggests that a Committee on Physical Therapy be appointed for another year, pending the necessary changes in the Constitution and By-Laws of the

Association if a Standing Committee is to be appointed.

(Signed) J. T. OLIPHANT, *Chairman*,
W. P. MORTON,
R. G. HARKNESS,
C. V. ROZELLE,
G. M. ROSENHEIMER.

Mr. Chairman, I move the adoption of this report.

G. R. DANIELS (Marion): I second the motion.

KARL RUDDELL: You have heard the motion and second that this report be adopted. What is your pleasure? Those in favor signify by saying "aye."

HOUSE: Aye.

KARL RUDDELL: Opposed, "no." (No response.) Carried.

C. V. ROZELLE: I rise to a point of special privilege. Speaking for the members of the Eighth District Medical Society, I have the following communication to present to the Officers and this group of delegates:

"October 30, 1940.

To the Officers of the Indiana State Medical Association.
Gentlemen:

I hereby tender my resignation as Councilor for the Eighth District of the Indiana State Medical Association, effective immediately.

Respectfully submitted,
M. A. AUSTIN, M.D."

Publicity

W. M. STOUT: Gentlemen of the House of Delegates, your Reference Committee on Publicity has examined the report of the Bureau of Publicity as published in the Handbook and wishes to commend the standing committee for the thoroughness of the work it has accomplished. The year has seen an increasing activity on the part of this committee as evidenced by their releases to the press on articles of public health, and all this has been accomplished without bringing undue publicity to any individual of the profession. We feel that the local societies would do well to see that all such reports released to them receive the proper publicity they merit.

The report of the Committee on State Fair as published in the Handbook shows that this Committee has been active in the interests of the profession. The attendance and interest shown by the public in this exhibit would seem to justify its continuance in the future.

(Signed) WILLIAM C. WRIGHT, *Chairman*,
W. M. STOUT,
R. M. ANDERSON,
B. W. EGAN,
MARSHALL VARBLE.

I move the adoption of this report.

G. R. DANIELS: Second the motion.

KARL RUDDELL: All those in favor of adopting this report, please signify by saying "aye."

HOUSE: Aye.

KARL RUDDELL: Opposed, "no." (No response.) Carried.

Amendments to Constitution and By-Laws

H. C. METCALF: Gentlemen of the House of Delegates, we, the Committee on Constitution and By-Laws, wish to make the following recommendations:

(1) We approve the change in Section 3 of Article IX of the Constitution which would strike out the following words:

"No delegate shall be eligible to any office named in the preceding Section, except that of Councilor."

(2) Change in age limit for honorary members. The Committee does not approve of any change in Article IV, Section 5 of the Constitution. The age at which a physician is entitled to honorary membership in the Indiana State Medical Association should remain at seventy-five years.

(3) We approve the change in Article II of the Constitution deleting the word "material."

(4) We also approve of deleting the word "material" in Section 4, Chapter VII, of the By-Laws.

(5) The following resolution which amends Chapter IV, Section 2, of the By-Laws is approved by the Committee:

BE IT RESOLVED, that Chapter IV, Section 2, of the By-Laws of the Indiana State Medical Association be amended by striking out the period after the word "delegate," in line 8 of the said Section, and substituting a comma therefor, and then by adding after the comma the following:

"except that where a component society is made up of physicians of more than one county, each county shall be entitled to at least one delegate to be selected by the physicians residing in such county."

Signed by direction of the Committee,
H. C. METCALF, *Chairman*,
C. G. KERN,
C. E. CARNEY,
T. W. OBERLIN,
MAURICE KAHLER.

Mr. President, I move the adoption of this report.

J. E. FERRELL: I second the motion.

J. H. WEINSTEIN: Dr. Ruddell, I move that the House consider each Section of Dr. Metcalf's report separately and vote upon each Section.

CLAUDE PAYNTER: I move the adoption of paragraph 1 of the report.

DELEGATE: I second the motion.

(Drs. J. H. Weinstein, F. S. Crockett, R. L. Sensenich, Ira Perry, C. V. Rozelle, and H. C. Wadsworth discussed the Section, after which it was voted to adopt paragraph 1.)

H. C. WADSWORTH: Mr. President, I move the second section of the report, which states "the age at which a physician is entitled to honorary membership in the Indiana State Medical Association should remain at seventy-five years," be approved by the House.

CLAUDE PAYNTER: I second the motion.

KARL RUDDELL: It has been moved and seconded to accept Section 2 of the report. All those in favor signify by saying "aye."

HOUSE: Aye.

KARL RUDDELL: Contrary, "no." The ayes have it.

(At this point Dr. W. A. Thompson introduced

Dr. Charles S. Bond of Richmond, who was president of the Indiana State Medical Association in 1895.)

H. C. WADSWORTH: Mr. President, I move the adoption of Section 3 of Dr. Metcalf's report.

DELEGATE: Second.

KARL RUDDELL: All those in favor signify by saying "aye."

HOUSE: Aye.

KARL RUDDELL: Section 3 of the report is adopted.

CLAUDE PAYNTER: I move the adoption of Section 4.

H. C. WADSWORTH: Second the motion.

KARL RUDDELL: Those in favor of adopting Section 4 of the report signify by saying "aye."

HOUSE: Aye.

KARL RUDDELL: Opposed, "no." Section 4 is adopted. Is there any discussion on Section 5?

(Drs. J. H. Weinstein, Carl McCaskey, and Philip Holland discussed the fifth Section of Dr. Metcalf's report.)

G. H. HANSELL: I move the adoption of Section 5.

CLAUDE PAYNTER: Second.

KARL RUDDELL: It has been moved and seconded to accept Section 5 of the reference committee's report. All in favor signify by saying "aye."

HOUSE: Aye.

KARL RUDDELL: Those opposed? Carried. Now is there a motion that the report be accepted as a whole?

G. R. DANIELS: I so move.

O. G. BRUBAKER: Second the motion.

KARL RUDDELL: It has been moved and duly seconded to accept the report as a whole. Those in favor signify by saying "aye."

HOUSE: Aye.

KARL RUDDELL: Those opposed, "no." Carried.

Reports of Officers

A. C. YODER: Gentlemen of the House of Delegates, the following reports were referred to this Committee:

(1) Dr. Ruddell's address. The commitee commends Dr. Ruddell on the splendid summary of world conditions. We wish to call especial attention to the necessity of making plans for the care of the low income group.

(2) Dr. Mitchell's address. The committee commends Dr. Mitchell on the sentiments expressed especially in regard to forgetting petty differences and standing together.

(3) Report of Executive Secretary. We, your Reference Committee, feel that we know the work of Mr. Hendricks as much, and even more, by the attention that he pays to matters of detail in the running of our association, as we do through his annual report. We heartily commend both his work and his report and we move the adoption of his report.

(4) Treasurer's report. The committee finds the report of the Treasurer correct, brief, and comprehensive. There are no corrections. Therefore the committee moves the approval of the Treasurer's report as submitted.

(5) Report of Chairman of the Council. We approve the report of the Chairman of the Council, Dr. M. A. Austin. The report reflects the basic policies of our Association, these policies having been adopted and made operative by votes and concurrence of the members of the Council.

We mention increase in annual dues, the Association as a whole underwriting the total expense of the Annual Session, the selection of the Editorial Board, the printing of THE JOURNAL, the payment of the actual expenses of committeemen for attending committee meetings other than those in connection with the annual meeting of the State Association.

We move the adoption of the report of Dr. Austin, Chairman of the Council.

(6) Report of Executive Committee. This can best be divided into two sections:

Section I. Regarding the original report as printed in the Handbook, the conservative attitude of the committee upon the various problems arising throughout the year is to be commended. The same is true also for the great amount of work done.

Special attention is called to the fact that the membership in our organization is now the highest in its history, there being now 3,120 members out of 4,132 physicians in the state.

We move the adoption of the report of the Executive Committee.

(Section II. Deleted.)

(Parts 1, 2, 3, 4, 5, and Section I of part 6 were taken by consent on the motion of Dr. G. R. Daniels.)

A. C. YODER (Goshen):

(7) THE JOURNAL. The committee congratulates Dr. Shanklin and the staff of THE JOURNAL on their excellent report and on the quality of the publication. The increase in circulation is very gratifying. The committee moved that the report be accepted.

(8) Report of the Delegates to the A.M.A. Dr. H. G. Hamer made a report on the meeting of the American Medical Association in June, 1940, at New York, which appeared in the July issue of THE JOURNAL. This report is complete and is illuminating. For example, Dr. Hamer reports the passing of an amendment excluding osteopaths from membership in the A.M.A. The members of your Reference Committee didn't know that they ever were eligible.

Also an amendment was passed making it unprofessional to accept remuneration from patents.

Steps to mobilize the medical profession with the proper government agencies, the approval of the appointment of an advisory committee to state health boards in the construction of any proposed hospitals, the disapproval of the establishment of a national neuropsychiatric institute, are other important matters reported by Dr. Hamer.

We recommend the adoption of Dr. Hamer's report.

Respectfully submitted:
A. C. YODER, *Chairman*,
T. Z. BALL,
J. O. RITCHEY,
E. E. SHROCK,
F. E. KEELING.

(Parts 7 and 8 were taken by consent on the motion of Dr. G. R. Daniels.)

KARL RUDDELL: It has been moved and seconded by consent that the report be adopted as a whole. All those in favor say "aye."

HOUSE: Aye.

KARL RUDDELL: Contrary? (No response.)

We will have the report of the Committee on Credentials. Dr. Carver.

WALTER CARVER: The report of the Committee on Credentials:

Delegates present at the meeting October 29, 1940	75
Councilors	10
Past Presidents, Officers	12
Total	97

The credentials of all delegates were in order.

(Signed) W. F. CARVER,
W. THOMPSON,
W. KELLY,
W. E. AMY.

Supplementary report, the present meeting:

Delegates present at the meeting October 30, 1940	67
Past Presidents	9
Councilors	8
Officers	5
Total	89

I move the adoption of the report.

HOUSE: Second.

KARL RUDDELL: Taken by consent.

Now the report of the Committee on Miscellaneous Business. Dr. Ball.

C. A. BALL: Mr. President, gentlemen of the House of Delegates:

Article I. Your committee approves the resolution of Dr. M. R. Lohman of Allen County, namely, "That the State Society remit the dues of members of the Society who are called to the colors, during the duration of such military service."

KARL RUDDELL: The adoption of this report will be by sections. Article I is taken by consent.

C. A. BALL: Article II. The Indiana State Medical Association, acting through its officers, M-Day Committee, and component county societies deserves and should receive the wholehearted praise and cooperation of every doctor in Indiana for their foresight and help in furthering medical preparedness in our State. We particularly commend the State Society, the Governor of our State, and other officials in their choice of county Selective Service members and district medical advisory boards. We recommend that every doctor in Indiana who hasn't already registered both with State and American Medical Association do so at once.

KARL RUDDELL: Article II is taken by consent. Is there any discussion? Excuse me; it is taken by consent.

C. A. BALL: Article III. We approve in principle the resolution of the Military Relations Committee of the Indianapolis Medical Society but doubts its practicability. Similar plans were tried in various communities during World War No. 1 with only indifferent success. Let such communities that desire work out their own plans.

KARL RUDDELL: Article III is taken by consent.

C. A. BALL: Article IV. The Orange County Medical Society and the Ladies' Auxiliary are heartily commended for the character of entertainment and hospitality shown. We feel that French Lick is an ideal convention city and nature has done her best to cooperate.

(Signed) C. A. BALL, *Chairman*,
CLAUDE PAYNTER,
O. G. BRUBAKER,
C. R. PETTIBONE,
GORDON A. THOMAS.

I move the report be accepted as a whole.

CLAUDE PAYNTER (Salem): I second the motion.

KARL RUDDELL: It has been moved and seconded to accept the report as a whole. All in favor say "aye."

HOUSE: Aye.

KARL RUDDELL: We will now have the report of the Special Committee on Health Insurance by Dr. Crockett.

F. S. CROCKETT: Mr. President, this is not a two-hour report.

Reporting on the Federal plan for hospital construction, we commend the recommendation that if no present need appears for building new hospitals, that if such Federal funds are accepted, they should be used only for equipment or extension of existing facilities, and then only where the need is certified to by the local hospital authorities and the local taxing unit.

Last year this House of Delegates endorsed non-profit medical plans, giving the benefits in the form of cash indemnity and not medical service.

We are aware that a number of state and county societies have in operation plans for non-profit medical care, giving benefits in the form of medical service. While the A.M.A. has endorsed the principle of cash indemnity, it has interposed no objection to the experimental trial of service plans.

Service plans strive to maintain free choice of physician and the confidential physician-patient relation. It is perhaps easier to administer and to sell.

If it is limited to those of the low income group who can pay only part of the average fee, it might not disturb the financial relation of this group with their medical advisors, since the physicians participating in the plans would receive in either event

something less than the recognized value of their services.

Where a large industrial group comprising a family membership of some 50,000 seeks a medical service plan, it is wholly possible that many in the higher earning would be included.

Another objection to medical service as distinguished from cash indemnity is the education of many to expect a valued service unrelated to direct payment for it. In some foreign countries such experience has induced a call for government taking over when the plan gets into financial difficulties such as may happen through epidemics or faulty management.

After all, in such plans the participating doctors become insurance carriers. They must complete the contract when available funds are insufficient for full payment.

All such plans are predicated upon the cost element as distinguished from the quality of service rendered. The threat from the industrial union groups cited above was not to build and operate a higher grade of service but that they would hire physicians to obtain cheaper service, a service costing less to the members.

There is no logical limit or stopping point to under-bidding except the financial ruin of the competitors. No matter what the group leader says, the individual of the group wants the best medical service, not the cheapest. If this is not true, then competition by first-class physicians with those willing to give something less than the best graduated to a price base, becomes impossible through a conflict in ideals (ideologies).

A contract based on a graduated fee basis, having in view the ability to pay, and wherein the beneficiary pays directly him who renders the service for the service rendered, is on the soundest psychotic and personal relation.

It is difficult to understand the workings of a mind which organizes one group for the primary purpose of improving working conditions and increasing wages, while asking another group to render service for less than the recognized value of that service and threatening a price cutting assault through the hiring of doctors brought in presumably from other localities. I believe labor itself has a name for that.

The preservation and maintenance of the principle that the recipient pay something for each service rendered is essential to any and all professional relationships, and is in harmony with the well-known principle that a thing is valued directly in proportion to its cost. This principle will discourage over-use and needless calls upon the time of the participating physician.

It is recognized that we must live realistically and must modify our methods from time to time to meet the actualities of our locale.

We believe, however, that medical service as the form of indemnity is an unsound insurance principle, lacking actuarial justification on account of the unpredictable nature of risk involved.

Your Reference Committee would modify or change the committee report by disapproving the medical service plan wherein an unspecified amount of service is to be given in return for a premium paid.

Since this debatable subject cannot be settled satisfactorily by a Reference Committee, we recommend that the Council and any other interested committees act with the State Hospital Association and the Governor's Commission, that they be instructed to maintain the principles outlined herein in the formation of any proposed legislation. We specifically reindorse the principle of cash indemnity medical insurance. We recommend that medical service plans be encouraged on an experimental basis in those localities where the sentiment of the profession and the public warrants it.

We recommend that the Council take such action as may be deemed advisable to advance these purposes and initiate such legislation as may be needed.

I move the adoption of this section of the report.

KARL RUDDELL: Section I is taken by consent. Dr. Sensenich.

R. L. SENSENICH: I would like to call attention to the serious danger of passing legislation in order to conduct experiments in the establishment of new types of medical care or insurance. Obviously, such legislation can be used by non-medical individuals in conducting programs for selfish objectives that would tend to destroy standards of medical service and do great harm to the public. Inasmuch as experiments are already under way in other states, some of which are not meeting with the success anticipated and are already exhibiting harmful tendencies, it might be wise to wait for a time to avail ourselves of the experience of these other groups before engaging in new experiments.

KARL RUDDELL: Is there any further discussion? Dr. Paynter.

CLAUDE PAYNTER: May I ask this question of Dr. Crockett? Wasn't it the intent to refer this communication to the councilors in order that they might determine the methods conducted by the medical profession?

F. S. CROCKETT: I will re-read. "We recommend that the Council take such action as may be deemed advisable to advance these purposes and to initiate such legislation as may be needed."

C. J. CLARK: I just questioned whether or not it might be advisable to have your Reference Committee talk to Dr. Sensenich about this thing to see if there was any change that they might want to make in their report and then have it carried over until tomorrow morning's session.

F. S. CROCKETT: Mr. Chairman, your Reference Committee in discussing this matter recognized the situation as it has been described by the doctor from Lake County.

(Dr. Crockett's following remarks were off the record.)

I again move the adoption of this report.

KARL RUDDELL: Is there a second to the motion?

CLAUDE PAYNTER: I second that motion.

KARL RUDDELL: Are you ready for the question? All those in favor of accepting the report of the committee as read, say "aye."

DELEGATES: Aye. (Majority.)

KARL RUDDELL: Opposed, "no."

DELEGATES: No. (Minority.)

KARL RUDDELL: The ayes have it.

F. S. CROCKETT: We approve the suggestion that a study be made of the problem of aid to needy members of the profession in Indiana, and recommend the appointment of a study committee to report to the next annual session of this House of Delegates.

I move the adoption of this portion of the report.

KARL RUDDELL: Taken by consent.

F. S. CROCKETT: Owing to the volume of work involved, we concur in the recommendation that the duties of the committee be divided.

We recommend that the Council be instructed to reassign portions of the work, if possible among existing committees, and to determine the advisability of continuing the present committee and of the duties to be assigned to it.

In other words, the purpose was to throw this back to the Council to revalue the need for the work or any other use or purpose that they wish to assign it.

I move the adoption of this portion of the report.

KARL RUDDELL: Taken by consent.

F. S. CROCKETT: The report of the Director of Research on Sickness Insurance reflects clearly the passage and events of the year now closing. He notes that the clamor for socialized medicine seems to be lessening in volume, and while not sure that this is due to lessened demand, he realizes that it may simply be that the public mind has been turned to the more pressing problem of possible threats from abroad.

Dr. Kennedy calls attention again to the fact that all plans for health insurance, whether cash indemnity or service type, still lack a proper actuarial basis for computing the premium necessary to pay the costs and to maintain proper reserves. This is especially true where the plan calls for medical service as the form of benefit.

Dr. Kennedy voices the general concern of the profession over the possible effect upon the public mind that may come through educating them to accept impersonal service of medical insurance in lieu of the more intimate one of the present method. He recognizes that the subject and experience are still largely in the state of flux and can only hope that with the passage of time and the return of better economic conditions the question of the cost of medical care and the maintenance of its personal relations will solve themselves.

Your Committee wishes to commend the Director of Research on Sickness Insurance for his comprehensive and penetrating analysis. We move the adoption of this portion of the report.

KARL RUDDELL: Taken by consent.

F. S. CROCKETT: We then move the adoption of the committee report as a whole.

KARL RUDDELL: Unanimously seconded. Then all in favor of that motion to adopt the report as a whole say "aye."

HOUSE: Aye.

KARL RUDDELL: Opposed, "no." (No response.) Carried.

F. S. CROCKETT: Respectfully submitted by:

F. S. CROCKETT, *Chairman*
HERMAN M. BAKER
C. M. JONES
GEORGE DILLINGER
JON N. KELLY

KARL RUDDELL: I understand Dr. Asher is now ready to make his report. The Reference Committee on Public Policy and Legislation.

E. O. ASHER: Mr. President, members of the House of Delegates, this is the report of the Reference Committee on Public Policy and Legislation. The report was handed to us from the Committee on Public Policy and Legislation and we approved this report as published in the Handbook and as supplemented also from the floor. We feel that the Association is deeply indebted to this committee for its untiring efforts in our behalf. We especially commend the committee for increasing the interest in the activities of the Auxiliaries to the various county medical societies.

I move the adoption of this portion of the report which I think should be given to you in sections.

KARL RUDDELL: Taken by consent.

E. O. ASHER: The Committee on Civic and Industrial Relations had no report for us. The Committee on Public Relations had a very short report as is in the Handbook. I move the adoption of these reports as given.

KARL RUDDELL: Taken by consent.

E. O. ASHER: Regarding the Permanent Study Committee on Health Insurance and National Medical Situation, we were assigned six sections of that report. We approve in this report, sections 1, 2, 3, and 4 as appearing in the Handbook. Section 5, to this we wish to add the following recommendation: That the Indiana State Medical Association through its officers insist upon those various persons who are responsible for the employment of physicians and nurses for public work determine that the physicians and nurses so employed be required to have a license to practice their profession in the State of Indiana, and that each be required to be a citizen of the United States of America.

Section 6. We do not recommend Section 6 of their report, and furthermore the committee urgently suggests that the Indiana State Medical Association should not officially approve any organization of physicians for any purpose other than its county and district medical societies and the American Medical Association. This concludes our work on this committee report, and I move the adoption of our report.

G. R. DANIELS: I would like to hear what is going on now. I would like to know what the handbook covers.

E. O. ASHER: Page 82 in the handbook. There is a bit of black print there which we call the main part of their recommendation. Here is what they say: "We recommend that the Indiana State Medical Association approve the purposes and aims of the National Physicians' Committee for the extension of medical service, and is in accord with the individual contributions of its members to its support in proportion to their ability." Is that clear, Dr. Daniels? We changed that because we asked that the state medical association not go into this matter of approval or disapproval of any organization which is not an organized county, state or American Medical Association organization.

F. S. CROCKETT: You don't mean to disapprove of this committee's work, but it's just that you don't feel called upon, or we're not to feel called upon to recommend it?

E. O. ASHER: That's it. We should not be called upon to recommend the National Physicians' Committee.

KARL RUDDELL: If there is no other discussion, then that is taken by consent.

E. O. ASHER: Now the State Board of Health Liaison Committee to Deal with Social Security Act. We approved that report, and we also approved the Sub-Committee Report on the Study of Maternal Morbidity and Mortality Rates for Indiana. We approved that, and I move the adoption of those two sections of this report.

KARL RUDDELL: Taken by consent.

E. O. ASHER: The Liaison Committee to Deal with the Crippled Children's Bureau. Your reference committee has read carefully the above mentioned report, and notes that it is signed and approved by distinguished members of our society.

In general, we approve of that part of the report which commends Dr. Greer for his efforts to establish under the Department of Public Welfare a competent organization to carry out the purposes of the acts of Congress and our state legislature in social security legislation.

We wish to call attention to the fact that the Act of 1933 provides for the commitment of afflicted children below 16 years of age to local hospitals in the county in which the child has legal settlement or to an adjacent county. And it is understood that at the discretion of the committing judge, he may include a provision for the payment of medical costs to the attending physician.

We move the adoption of this report.

D. F. CAMERON: Mr. Chairman, may I have the floor for a few minutes? Members of the House, Dr. Asher very graciously gave me permission when I appeared before the committee to present some views I had, and then he asked me if I wouldn't write out what recommendations I thought should be made. Now if you will permit me, I will read what I thought should be recommended in place of the recommendation of the reference committee.

"First. We note, however, that the effect of this legislation and some of the rules adopted for its enforcement have produced the following objectionable results:"—May I state we are speaking about this Crippled Children's Act by which only certified orthopedic surgeons in this State, of whom there were only nine in the last directory, alone are permitted to take care of this work. Furthermore, may I remind you that under the definition of orthopedic work in this affair, it includes all fractures, all injuries to muscle, bones and joints, all congenital deformities, cleft palate, harelip, extra fingers and toes, arthritis—it directs these welfare workers to send all of that to these certified orthopedic surgeons and to them alone.

"Second. By restricting the personnel of doctors acceptable to the bureau to licentiates of the American Board of Orthopedic Surgery only, only nine or ten men in the State are eligible, and these are located in only two cities outside the city of Indianapolis. The result of this is that the care of all indigent, crippled children in the State is taken out of the hands entirely of the family doctor and centered for the most part at the Riley Hospital. If this is desirable, there is no reason which would prevent licentiates of the other specialty boards from demanding the same privilege, i. e., the right to reserve for themselves alone all the work on indigents which would be classified in their special fields. If carried to this point, none of this work which, unfortunately, is rapidly increasing in amount would be left with the family doctors. As an example of this increase in indigent work, we note that the number receiving orthopedic care alone in this State rose from 1,658 in 1938 to 2,534 in 1939.

"Third. A second objectionable result is the marked increase in inefficiency and cost resulting from this centralization of medical care. The public is just now beginning to realize the tremendous increase in the cost of the Department of Public Welfare."

In Steuben county alone, I had the ex-auditor of the county go over the cost in that county—it's small, only 14,000 people. In 1921, the total relief load was $5,800; last year, it was $113,000. That is just a sample of what has gone on in every county. This is an inefficient and costly way of doing a simple job.

"Fourth. This is a direct extension of a governmental bureau into the practice of medicine . . ." because it forces all of this work into a governmental agency, and the local doctors are not consulted at all, in any fashion.

"Fifth. The operation of this bureau violates directly the one fundamental principle on which is based all private medical practice, viz., the right of the patient to choose his own doctor." We have

heard that many, many times; there is not a word of that mentioned here.

"Sixth. Young and competent doctors will be less and less inclined to locate in smaller counties as a result of the government's taking away part of the practice normally belonging to such counties. The medical profession is already criticised because many smaller communities are without doctors."

The Indiana State Medical Association must not fail to realize at all times that the family doctor is its main stay as he is also the chief purveyor of medical care to all the people. Through him and his own professional connections all people can best be served. I believe in the long run the profession as a whole as well as the people will realize that the invasion of his field by politically appointed doctors and specialists will prove to be a very inefficient and very expensive method of furnishing medical care.

"Your Reference Committee strongly recommends that proper steps be taken by the Crippled Children's Bureau to eliminate as far as possible these obvious objectionable features in its operation."

Now you can take your choice about it.

IRA E. PERRY: Mr. Chairman, may we have part of that report read again, please? (Report reread and its adoption moved.)

KARL RUDDELL: Is there a second to this motion?

C. J. CLARK: Second the motion.

R. L. SENSENICH: In the absence of the chairmen of the committee, may I discuss this matter? I have known about this activity ever since it was started, for the reason that when this law was enacted in the State Legislature, I was president of the Indiana State Medical Association.

Prior to the establishment of the two centers, one in St. Joseph County and one in Allen County, crippled children were sent to the Riley Hospital at Indianapolis for treatment. Without reflecting in any way upon the facilities or the quality of the work done there, a major reason was financial. When an indigent child was committed to Riley Hospital by the Judge of the Circuit Court, the county from which the child was sent paid $3.00 per day for the service in Riley Hospital. This amount paid for the medical service as well as the hospital care and everything except special appliances. Obviously the cost of care in Riley Hospital greatly exceeded the $3.00 per day paid by the local county. The difference must therefore come out of State funds. In many instances the local profession and the general public were not aware that the county paid anything to Riley Hospital for the care of these patients.

When the centers at South Bend and Fort Wayne were set up, the local hospitals found it very difficult and in fact almost impossible to provide hospital care for $3.00 per day. For that reason a slightly increased rate has been established for the first week in the hospital, from which amount the necessary laboratory work must be paid. In order to meet the competition from the State Hospital in which the physician's service is provided without cost to the county from which the patient is committed, it has been necessary for local orthopedic surgeons to furnish service for a minimal honorarium covering all the services they give on an annual basis.

The matter of requiring certification for an orthopedic surgeon as a qualification for those who do the orthopedic work—this requirement was set down by Washington. It might as well be recognized that no matter whatever the local activity, when the funds are derived from Washington, the agency which controls the purse writes the ticket. Everything done under the Crippled Children Activity in the State today in which Federal funds are used must be approved in every detail by Washington before one cent is available.

As to whether the orthopedic work for crippled children could be distributed over a wider area and include surgeons not connected with the local centers: in this matter the Liaison Committee can do nothing more than advise, and I can speak only for myself. I hope that in time certain kinds of cases can be distributed and done in local communities by some men who may not be certified orthopedic surgeons. Up to this time this has not been possible. It would present certain difficulties which have been very troublesome in some other states, in that the keeping of open accounts and control of the kind of work done among a great many different physicians would add much to the complexity of the problem. On the other hand it can be frankly stated that some men would wish to do orthopedic work for which they were obviously not qualified. This is not critical of them, it is only human nature. In the main the orthopedic work should be done only by men with special experience and training as it would be impossible to set up the machinery to supervise activities going on in widely separated areas.

As it now stands the work is to be limited to the indigent. However, inasmuch as it includes up to the age of 21 and the definition of "crippling" may be variously interpreted, it incorporates a possible large volume of work. It can be abused. A local judge may commit a child to a local hospital, but in that instance there arises the question of pay to the local surgeon. The above are only some of the problems, but you will note the financial one is a major one.

I have been a member of the Liaison Committee ever since it was appointed. Perhaps I should not be there. My interest has been in assisting as far as I could, as have other members of the Liaison Committee as well as Dr. Greer, to do everything possible to have the work of the crippled children done well, in or near the homes of the patients if possible, and with as little dislocation of the local practice of medicine as possible. Dr. Cameron brought out a few moments ago the matter of the cost of local welfare activities. Having that in mind you must recognize that whenever the local costs exceed $3.00 per day you may be met with the

argument that it can be done at Riley Hospital for $3.00 per day.

Bear in mind, I do not wish to speak unkindly about Riley Hospital or the work done at Riley, for which I have the greatest interest and admiration, but the financial mechanics of the situation must be recognized. Obviously, not everything can or should be done at one central hospital. A broader distribution of the work with any necessary adjustment of the financial situation would not in any way injure Riley Hospital or impair its work if facilities and trained personnel are made available in other counties. I thought this information might be helpful to you.

KARL RUDDELL: Gentlemen, are you ready for the question?

J. W. WEINSTEIN: Dr. Ruddell, I would just like to add one word there: I am sure that we could not find anyone who is more sympathetic to the general practitioner, to the general surgeon, than Dr. Greer is in the position that he is in. He is in a peculiar position there in that he must ride two horses, and he is giving the best of it to the horse of the members of the Indiana State Medical Association.

As Dr. Sensenich has said, our hands are tied in certain things; we're definitely directed by the federal government, otherwise we don't get the money.

P. T. HOLLAND: This bears directly on the same topic and simply was mentioned yesterday concerning these commissions to Riley particularly and these crippled children—many trustees of townships refer these patients in, as Dr. Sensenich said. They can transfer expenses from their township to the county in which the township is located and thereby get it off their local township budget. That was brought up yesterday and it has been a bone of contention in Monroe County for a long time because certain trustees send everything that they can in there and practically limit what work is done locally.

For that reason, taking the costs out of the county budget rather than the township's budget has a direct bearing on this question.

KARL RUDDELL: Gentlemen, we have to get out of here; if you have any remarks, make them very short. Are you ready for the question? All in favor of adopting this part of the report say "aye."

HOUSE: Aye.

KARL RUDDELL: Contrary, "no." (No response.) The ayes have it.

E. O. ASHER: The Committee on Cultists and Irregular Practitioners. We move the adoption of this report as printed in the Handbook.

KARL RUDDELL: Taken by consent.

E. O. ASHER: The Committee on Medical Relief. We move the adoption of the report as read from the floor and wish specifically to commend this committee for its outstanding work.

KARL RUDDELL: Taken by consent.

E. O. ASHER: The Oberlin resolution. In the matter of the resolution offered by Dr. T. W. Oberlin of Lake county, we wish to offer the resolution that the Indiana State Medical Association deplores the passage of legislation under the guise of public health measures when in fact such legislation is for a purpose foreign to public health.

Furthermore, whenever a law requires an examination of individuals, the Indiana State Medical Association insists that such examination shall be made in the traditional democratic manner which this Association has always stood for, namely, the right of the individual to choose his own physician.

I move the adoption of that portion of the report.

KARL RUDDELL: Taken by consent.

E. O. ASHER: The Clark resolution. This is in regard to House Bill 74. We do not approve this resolution, but wish to offer the following suggestions in the change of House Bill 74.

That every indigent case sent to any hospital should be certified by the judge having jurisdiction upon recommendation of the family physician and one other physician appointed by the judge, making two physicians; the hospital to be chosen by the judge. The payment for such hospitalization to be made by the county from which the patient is committed.

I move the adoption of that part of the report.

KARL RUDDELL: Taken by consent.

E. O. ASHER: That concludes our report and it is signed by:

E. O. ASHER
PAUL GARBER
O. A. PROVINCE
MINOR MILLER
R. W. LAVENGOOD

I wish the adoption of the report as a whole.

KARL RUDDELL: Seconded unanimously. All in favor of adopting the report as a whole say "aye."

HOUSE: Aye.

KARL RUDDELL: Contrary, "no." (No response.)

I also wish to commend the members of this Committee because they came to every session and were all present.

IRA E. PERRY: Mr. President, I move we recess at this time.

KARL RUDDELL: We adjourn this time, Doctor. The House is adjourned.

HOUSE OF DELEGATES

(French Lick Session, 1940)

Third Meeting

The third meeting of the House of Delegates, a breakfast meeting, was called to order at 7:30 a. m., Thursday, October 31, 1940, in the West Dining Room of the French Lick Springs Hotel, French Lick, by Dr. Karl R. Ruddell, president.

Upon the motion of Dr. M. B. Catlett, seconded by Dr. J. N. Kelly, roll call was dispensed with and the signed attendance slips showing the following present were accepted as the roll call:

County	*Delegates*
Allen:	M. B. Catlett, Fort Wayne
	M. R. Lohman, Fort Wayne
	William C. Wright, Fort Wayne

County	*Delegates*
Boone:	C. G. Kern, Lebanon
Cass:	B. W. Egan, Logansport
Clay:	H. H. Ward, Coalmont
Daviess-Martin:	S. L. McPherson, Washington
Dearborn-Ohio:	G. H. Hansell, Rising Sun
Decatur:	H. S. McKee, Greensburg
DeKalb:	C. I. Weirich, Butler
Delaware-Blackford:	Clay A. Ball, Muncie
	G. A. Owsley, Hartford City
Dubois:	A. H. Held, Huntingburg
Elkhart:	A. C. Yoder, Goshen
Fayette-Franklin:	H. C. Metcalf, Connersville
Floyd:	William W. Weaver, New Albany
Fountain-Warren:	J. Carl Freed, Attica
Gibson:	C. M. Clark, Oakland City
Grant:	Russell W. Lavengood, Marion
Hancock:	J. E. Ferrell, Fortville
Harrison:	William E. Amy, Corydon
Hendricks:	O. T. Scamahorn, Pittsboro
Henry:	Walter M. Stout, Newcastle
Huntington:	C. S. Black, Warren
Jasper-Newton:	A. R. Kresler, Rensselaer
Jay:	F. E. Keeling, Portland
Jennings:	W. L. Grossman, North Vernon
Johnson:	O. A. Province, Franklin
Knox:	Richard M. Anderson, Vincennes
Kosciusko:	Orville H. Richer, Warsaw
Lake:	W. H. Howard, Hammond
	C. R. Pettibone, Crown Point
	P. Q. Row, Hammond
LaPorte:	J. N. Kelly, LaPorte
	G. O. Larson, LaPorte, alternate
Lawrence:	R. B. Smallwood, Bedford
Madison:	C. V. Rozelle, Anderson
Marion:	E. O. Asher, New Augusta
	T. J. Dugan, Indianapolis
	E. W. Dyar, Indianapolis
	Frank M. Gastineau, Indianapolis
	Maurice V. Kahler, Indianapolis
	W. F. Kelly, Indianapolis
	C. H. McCaskey, Indianapolis
	W. P. Morton, Indianapolis
	H. F. Nolting, Indianapolis
	J. O. Ritchey, Indianapolis
	Lacey L. Shuler, Indianapolis
	O. W. Sicks, Indianapolis
	M. J. Spencer, Indianapolis
Marshall:	A. A. Thompson, Tyner
Miami:	S. D. Malouf, Peru
Monroe:	Philip T. Holland, Bloomington
Montgomery:	T. Z. Ball, Crawfordsville
Morgan:	M. C. Pitkin, Martinsville
Noble:	W. F. Carver, Albion
Orange:	George Dillinger, French Lick
Parke-Vermillion:	S. C. Darroch, Cayuga
Pike:	T. R. Rice, Petersburg
Porter:	G. R. Douglas, Valparaiso
Posey:	Harold E. Ropp, New Harmony
Putnam:	V. Earle Wiseman, Greencastle
Randolph:	J. S. Robison, Winchester
Rush:	C. C. Atkins, Rushville
St. Joseph:	A. S. Giordano, South Bend
	George M. Rosenheimer, South Bend
Shelby:	W. D. Inlow, Shelbyville
Sullivan:	J. T. Oliphant, Farmersburg
Tippecanoe:	Earl VanReed, Lafayette
	Gordon A. Thomas, Lafayette
Vanderburgh:	Minor Miller, Evansville
Vigo:	A. W. Cavins, Terre Haute
	E. O. Nay, Terre Haute
Wabash:	O. G. Brubaker, North Manchester
Warrick:	P. Bowen Hoover, Boonville
Washington:	Claude B. Paynter, Salem
Wayne-Union:	W. A. Thompson, Liberty
Wells:	Allen C. Nickel, Bluffton
Whitley:	Paul A. Garber, South Whitley

Councilors

First District:	I. C. Barclay, Evansville
Second District:	H. C. Wadsworth, Washington
Third District:	William H. Garner, New Albany
Fourth District:	J. C. Elliott, Guilford
Sixth District:	Samuel Kennedy, Shelbyville
Seventh District:	C. J. Clark, Indianapolis
Ninth District:	Floyd T. Romberger, Lafayette
Tenth District:	J. M. White, Gary
Eleventh District:	Ira E. Perry, North Manchester
Thirteenth District:	Alfred Ellison, South Bend

Past Presidents

E. M. Shanklin, Hammond
Charles N. Combs, Terre Haute
G. R. Daniels, Marion
C. E. Gillespie, Seymour
F. S. Crockett, Lafayette
J. H. Weinstein, Terre Haute
E. E. Padgett, Indianapolis
Herman M. Baker, Evansville

Officers

President—K. R. Ruddell, Indianapolis
President-Elect—A. M. Mitchell, Terre Haute
Treasurer—A. F. Weyerbacher, Indianapolis
Executive Secretary—T. A. Hendricks, Indianapolis
Delegate to the A.M.A.—D. F. Cameron, Fort Wayne
Alternate Delegate to the A.M.A.—N. M. Beatty, Indianapolis

Dr. Carver reported 97 voting members present.

THE CHAIRMAN: The House is open and ready for business. We will now entertain nominations for the office of president-elect.

ELECTION OF OFFICERS

President-elect:

Dr. C. V. Rozelle nominated Dr. M. A. Austin of Anderson.

Dr. George Daniels moved that the nominations be closed and that the secretary cast the unanimous ballot of the House for Dr. Austin for president-elect. Motion seconded by Dr. J. E. Ferrell, and carried. Ballot cast by the secretary for Dr. Austin for president-elect for 1941.

THE CHAIRMAN: I will appoint Dr. Rozelle, Dr. Clay Ball, and Dr. Samuel Kennedy to notify Dr. Austin.

THE CHAIRMAN: We will hear at this time a few words from Dr. Austin.

DR. M. A. AUSTIN: Gentlemen, I appreciate the fact that this is an occasion which comes to a man but once in his life. I also appreciate the fact that there have been only ninety-four other men similarly honored since the Indiana State Medical Association was established. However, in the background I am aware that it has been my privilege to have served the Madison County Medical Society as its secretary for 26 years. It has been my privilege to have served the Eighth District—Madison, Delaware, Blackford, Randolph and Jay counties—as councilor for 17 years, and to have served with and to have worked with the Council, and to have been privileged to have had those associations, as chairman of the Council for four years. So with the deepest feeling of gratitude I want to assure you that it will be my further honor and privilege to serve with and work for you as your president-elect.

Election of Treasurer:

Dr. C. J. Clark nominated Dr. A. F. Weyerbacher to succeed himself. Upon the motion of Dr. J. H. Weinstein, duly seconded, the nominations were closed and the secretary cast the unanimous ballot of the House for Dr. Weyerbacher for treasurer for 1941.

THE CHAIRMAN: I will ask Dr. Morton and Dr. Sicks to notify Dr. Weyerbacher.

Delegates to the American Medical Association:

THE CHAIRMAN: We will now hear nominations for delegates to the American Medical Association.

Dr. J. O. Ritchey nominated Dr. H. G. Hamer to succeed himself.

Dr. W. H. Garner nominated Dr. George Dillinger to succeed himself.

Dr. G. R. Daniels moved that the nominations be closed and that the secretary cast the unanimous ballot of the House for Dr. Hamer and Dr. Dillinger. Motion seconded and carried and ballot cast by the secrteary for Dr. Hamer and Dr. Dillinger for delegates to the American Medical Association to succeed themselves for the ensuing two years, that is, 1941 and 1942.

Alternate Delegates to the American Medical Association:

THE CHAIRMAN: Nominations are in order for alternate delegates to succeed Dr. W. F. Kelly of Indianapolis and Dr. A. S. Giordano of South Bend.

Dr. Alfred Ellison nominated Dr. A. S. Giordano to succeed himself.

Dr. E. O. Asher nominated Dr. W. F. Kelly to succeed himself.

DR. W. F. KELLY: I have served as an alternate for several years. I don't care to serve any longer. I would like to place in nomination the name of Dr. J. E. Ferrell of Hancock county to succeed me. I would like to have my name withdrawn.

Dr. Asher withdrew his nomination for Dr. Kelly.

Dr. Jon Kelly moved that the nominations be closed and that the secretary cast the unanimous ballot of the House for Dr. Giordano and Dr. Ferrell. Motion seconded and carried and ballot cast by the secretary for Dr. Giordano and Dr. Ferrell for alternate delegates to the American Medical Association to serve for the ensuing two years, that is, 1941 and 1942.

SELECTION OF MEETING PLACE FOR 1941

Dr. M. J. Spencer, upon behalf of the Marion County Medical Society, invited the association to hold its 1941 annual session in Indianapolis. Upon the motion of Dr. Daniels, the House voted to accept the invitation to meet in Indianapolis in 1941. The secretary stated that because of conventions already scheduled in Indianapolis for October, 1941, the Indiana State Medical Association would have to hold its meeting either the second or the fourth week in October.

Elections of Councilors:

Reports were made concerning the election of councilors for the following districts:

Third District—Dr. W. H. Garner, of New Albany, re-elected.

Fourth District—Dr. J. C. Elliott, of Guilford, appointed councilor pro tem in place of the late Dr. M. C. McKain, Columbus.

Sixth District—Dr. Samuel Kennedy, of Shelbyville, re-elected.

Eighth District—The Eighth District Medical Society will elect a successor to Dr. M. A. Austin, of Anderson, resigned, at its next meeting.

Ninth District—Dr. Floyd T. Romberger, of Lafayette, re-elected.

Twelfth District—Dr. H. L. Murdock, of Fort Wayne, elected for the three-year term beginning January 1, 1941.

THE CHAIRMAN: We will now have the report of the Reference Committee on Hygiene and Public Health.

DR. M. C. PITKIN:

House of Delegates,
Indiana State Medical Association.
Gentlemen:

The Reference Committee on Hygiene and Public Health has read the report of the Committee on Study of High School Athletics as it appears in the handbook and recommends its adoption.

The Reference Committee on Hygiene and Public Health has read the report of the Committee on Mental Health and recommends its adoption as it appears in the handbook.

The Reference Committee on Hygiene and Public Health has read the report of the Committee on Prevention of Traffic Accidents and recommends its adoption as it appears in the handbook.

The Reference Committee on Hygiene and Public Health has read the report of the Committee on Control of Cancer and suggests that paragraph No. 2 of the recommendations submitted by this committee, which reads as follows, be entirely deleted:

> "2. The establishment of diagnostic cancer clinics in some of the larger cities in Indiana where such service is not available. These clinics to be with consent and under the direction of the local county medical society officers and arranged in cooperation with the WFA."

Otherwise we recommend adoption of the report.

The Reference Committee on Hygiene and Public Health has read the report of the Committee on Venereal Disease and wishes to commend the members of this committee for the excellent work performed. We heartily approve and move the adoption of this report.

The reference committee on Hygiene and Public Health has studied the report of the Committee on Industrial Health as it appears in the handbook and the supplemental report which has been filed with it and which is as follows:

> "Emphasis is placed on appointment of one or two physicians as members of the Industrial Board. It is suggested that a liaison committee be appointed by the National Association of Manufacturers to work with this committee."

The Industrial Relations Committee of the Lake

County Medical Society has submitted the following protest to the reference committee:

"The Industrial Relations Committee of the Lake County Medical Society wish to enter their objections to the adoption of the report of the Committee on Industrial Health for the following reasons:

"1. Point 3 deals with the recommendation that 'all cases of industrial poisoning or dermatitis, etc., be reported to the State Bureau of Industrial Hygiene to enable this bureau to assist in finding the cause, if necessary.' We believe that the reporting of such cases should not be mandatory upon the industrial physician, but should be restricted to the reporting of such cases as the physician in charge feels constitutes some particular industrial hazard, the solution of which is of scientific and industrial interest and might be of value in securing the assistance of the facilities of the Bureau of Industrial Hygiene from the standpoint of scientific study. In the event of such a situation, we believe that these conditions should be reported only by number and without identification either as to plant or employee name, and that such reports be available only to interested physicians connected with such industries as may be involved, and not to the public at large or to any member of the various professions or trades since it is readily conceivable that undue advantage might be taken of this information.

"2. The statement of the committee that: 'Emphasis is made on the industrial physician not competing with the family physician, but limiting his extramural practice to only such cases as the workmen's compensation and occupational disease laws require of him' is, in our opinion, assuming that an agreement is to be made to place the practice of medicine, particularly as it applies to industrial practice, under the dictation of the State Medical Association, a function which it has no right to assume in limiting the activities of any one particular phase of practice, or group of practitioners, legally qualified, to just what they may or may not do in the conduct of their practice.

"We do not agree that any such emergency exists to require either the agreement to such a plan, or to expect the cooperation of our membership in the carrying out of such an agreement. If there are specific abuses in the way of a particular plant physician using unethical methods to secure private patients, by reason of his plant connection, this is a matter for the local county medical society to deal with, and should not be made a matter for State jurisdiction or control. We believe that this statement is particularly unwarranted and unnecessary and should be entirely deleted.

"3. We are not in sympathy or agreement with the plan as advocated in this committee report in many other of its minor proposals, since it appears to us that the intention implied is to place industrial practice under the direction of the State Association, and as a possible corollary in the name of 'defense provisions' under the dictation of the State Bureau of Industrial Hygiene. We are aware of the fact that it would be better to have state medical direction than to have bureaucratic dictation, but we cannot agree to the necessity for either. Local problems should be for local consideration and disposition, and there is no emergency existent that cannot be handled locally, or at best through cooperative assistance from the State body, without setting up a policy of absolute State control or dictation.

"We wish to specifically make clear that we have no objections or opposition to present at this time to the activities of Dr. Louis W. Spolyar, director of the State Bureau of Industrial Hygiene. We recognize his ability, his interest and his entirely ethical cooperation in this matter. We are, however, aware of the fact that he may not always be the director of this important bureau, and to submit our methods of practice to the dictates of any State bureau is not, in our opinion, American medicine.

"4. We submit the following proposal in substitution for the proposals of the Committee on Industrial Health:

"That the members of the Indiana State Medical Association cooperate with the State Bureau of Industrial Hygiene in its efforts to promote the welfare of industrial workers, to the extent that they will utilize, where necessary, the facilities of the State Bureau of Industrial Hygiene, particularly its consultation and laboratory facilities, and will lend their assistance, where necessary, to the Bureau personnel in their efforts to study and correct industrial hazards."

We feel that we cannot sustain these objections and we recommend the adoption of the report of the Committee on Industrial Health with its supplemental report.

The Reference Committee on Hygiene and Public Health has studied the report of the Anti-Tuberculosis Committee and wishes to commend the members of this committee for the excellent report. We recommend its adoption as it appears in the handbook.

The Reference Committee on Hygiene and Public Health recommends the adoption of the report of the Committee on Conservation of Vision as it appears in the handbook.

The Reference Committee on Hygiene and Public Health recommends the adoption of the report of the Pneumonia Committee as it appears in the handbook.

The Reference Committee on Hygiene and Public Health did not receive a report of the Liaison Committee with Indiana State Department of Public Welfare.

M. C. Pitkin, *Chairman*,
J. S. Robison,
R. D. Spindler,
Erwin Blackburn,
W. D. Inlow.

Dr. Daniels moved that Dr. Pitkin's report be accepted as a whole; motion seconded by Dr. M. R. Lohman, and report adopted.

DR. F. T. ROMBERGER: I would like to present the following resolution:

BE IT RESOLVED, That the House of Delegates of the Indiana State Medical Association express its most sincere appreciation to—

1. The Orange County and Third District Medical Societies—their members, their wives, and their families, for the delightful entertainment at this meeting;

2. Dr. and Mrs. George Dillinger; Mr. Taggart and Mr. Campbell of the French Lick Springs Hotel;

3. The press of the state, and

4. Our most hearty and sincere appreciation of the work of our retiring president. (Resolution taken by consent.)

THE CHAIRMAN: I appreciate very much the honor that has been bestowed upon me and I have done the best I knew how.

There being no further business, the House of Delegates of the Indiana State Medical Association adjourned *sine die*.

INDIANA STATE MEDICAL ASSOCIATION

FIRST GENERAL MEETING, OCTOBER 30, 1940

The first general meeting of the ninety-first annual session of the Indiana State Medical Association was held in the main convention hall of the French Lick Springs Hotel, October thirtieth. The meeting was called to order by the president, Dr. Karl R. Ruddell, of Indianapolis.

Dr. Ruddell introduced Dr. George Dillinger, chairman of convention arrangements, who welcomed the visitors to French Lick. Dr. Ruddell then introduced Dr. C. E. Boyd, of West Baden, president of the Orange County Medical Society, and Dr. C. E. Briscoe, New Albany, president of the Third District Medical Society, each of whom greeted the visitors and welcomed them to French Lick.

Dr. Ruddell presented his presidential address. Following this, Dr. Ruddell asked Dr. Robert Moore, of Indianapolis, to introduce Dr. Roy Wesley Scott, of Cleveland, who presented a paper on "Clinical Aspects of Arteriosclerosis."

Dr. Ruddell introduced Dr. Charles A. Flood, of New York City, who presented a paper on "Prognosis and Treatment in Peptic Ulcer."

Dr. A. M. Mitchell, of Terre Haute, took charge of the meeting and introduced Dr. Norvelle C. LaMar, of New York City, who talked on "Common Physical Disorders of Childhood," following which the meeting adjourned.

Second General Meeting, Thursday, October 31, 1940

The second general meeting was called to order at 9:40 a. m. by Dr. W. L. Portteus, of Franklin.

The first paper was presented by Dr. Joseph M. Hayman, of Cleveland, Ohio, on the subject, "The Diagnosis and Treatment of Acute Nephritis."

Dr. Irvin Abell, of Louisville, Kentucky, presented a paper on "Diagnostic Significance of Pain in the Abdomen." Following presentation of his paper, the president, Dr. Karl R. Ruddell, assumed the chair, and asked Dr. Abell to tell about some of his work in connection with the Medical Preparedness program. Dr. Abell talked for a few minutes on this subject.

At 10:45, Dr. Nicholson J. Eastman, of Baltimore, presented his paper on "Indications for Cesarean Section."

Dr. John Stanley Coulter, of Chicago, talked on "Physical Agents in the Treatment of Fractures."

The second general meeting adjourned at 11:45 a. m.

SECTION ON MEDICINE

The Medical Section met in the main convention hall of the French Lick Springs Hotel, Wednesday afternoon, October 30th. The meeting was called to order by the chairman, Dr. W. L. Portteus, of Franklin, at 2:10 p. m.

Dr. M. H. Draper, of Fort Wayne, read his paper on "Modern Methods of Treatment of Pulmonary Tuberculosis." This paper was illustrated with slides.

Dr. Portteus announced that there was no provision in the program for discussion, but that if, at the end of the program, sufficient time remained, questions could be asked then.

The next paper was presented by Dr. H. H. Rodin, of South Bend, whose subject was "Some Common Dermatoses Seen by the General Practitioner." Colored slides illustrated this paper.

Dr. Ralph U. Leser, of Indianapolis, read a paper on "Agranulocytic Angina."

Officers were elected as follows:

Chairman, John Warvel, M.D., Indianapolis
Vice-Chairman, James E. McMeel, M.D., South Bend
Secretary, Don Wood, M.D., Indianapolis

Guest speaker for the Section, Dr. Edmund L. Keeney, of Baltimore, talked on "The Theory and Practice of Therapeutics in Allergy."

Dr. William A. Shuck, of Madison, read a paper on "Some Complications of Pregnancy and Their Treatment."

Dr. Curtis R. Hoffman, of Richmond, read a paper on "Immunization Program for the Child of Pre-School Age."

The last paper of the afternoon was read by Dr. Harold F. Dunlap, of Indianapolis, on the subject: "The Clinical Significance and Treatment of States Associated with Low Basal Metabolic Rates."

The Medical Section adjourned at 5:15 p. m.

SECTION ON SURGERY

The Section on Surgery of the Indiana State Medical Association met in the North Hall of the

French Lick Springs Hotel at French Lick, Wednesday afternoon, October 30, 1940, with the chairman, Dr. William C. Wright, of Fort Wayne, presiding.

Dr. William R. Davidson, of Evansville, read a paper on "Treatment of Bumper Fractures." Discussion was opened by Dr. F. E. Hagie, of Richmond, and was continued by two physicians whose names were incorrectly recorded.

The second paper was read by Dr. R. L. Hane, of Fort Wayne, on the subject, "Recurrent Hyperthyroidism." This paper was illustrated with slides. The paper was discussed by Dr. J. R. Yung, of Terre Haute.

Dr. Frank B. Ramsey, of Indianapolis, presented a paper on "Carcinoma of the Colon and Rectum." The paper was illustrated with slides. Dr. Ramsey's paper was discussed by Dr. W. H. Baker, of South Bend, and Dr. L. W. Frank, of Louisville, Kentucky.

Dr. W. H. Howard, of Warsaw, read a paper on "Office Management of Pelvic Diseases." The scheduled discussant for this paper, Dr. C. O. McCormick, was not present.

The guest speaker, Dr. Austin H. Wood, of Baltimore, Maryland, presented a motion picture in technicolor on the subject, "Clinical Urology."

Officers for 1941 were elected as follows:

CHAIRMAN: JOSEPH H. CLEVENGER, M.D., MUNCIE
VICE-CHAIRMAN: ARNOLD H. DUEMLING, M.D., FT. WAYNE
SECRETARY: EARL V. WISEMAN, M.D., GREENCASTLE

SECTION ON OPHTHALMOLOGY AND OTOLARYNGOLOGY

The Section on Ophthalmology and Otolaryngology met in the Bamboo Room of the French Lick Springs Hotel, Wednesday, October 30th. The meeting was called to order at 2:20 p. m., by the chairman, B. W. Egan, M.D., of Logansport.

Dr. David A. Boyd, Jr., Indianapolis, read a paper entitled "Delirium Associated with Cataract Extraction." This was discussed by Drs. Orris T. Allen, Terre Haute; George R. Dillinger, French Lick; Carl B. Sputh, Indianapolis, and in closing by Dr. David A. Boyd, Jr.

Dr. Lyman T. Meiks, Indianapolis, read a paper entitled "The Influence of Tonsillectomy on the Progress of Rheumatic Heart Disease." This paper was discussed by Drs. C. H. McCaskey, Indianapolis; O. G. Brubaker, North Manchester; Howard B. Mettel, Indianapolis; Marlow W. Manion, Indianapolis; R. M. Dearmin, Indianapolis; William W. Weaver, New Albany, and Lyman T. Meiks.

Dr. E. O. Alvis, Indianapolis, read a paper entitled "The Eye in Industry," which was discussed by Drs. B. D. Ravdin, Evansville; C. E. Gillespie, Seymour; E. W. Dyar, Indianapolis; H. C. Knapp, Huntingburg; B. W. Egan, Logansport, and E. O. Alvis.

Dr. Ralph R. Mellon, Pittsburgh, Pennsylvania (guest speaker), read a paper entitled "Sulfathiazole, the Most Complete Sulfonamide Compound: Its Mode of Action." Discussion was entered into by Drs. R. M. Dearmin, Indianapolis; Donald Colglazier, Salem; B. E. Ellis, Indianapolis; R. P. Austin, Bedford; Sidney A. Aronson, Indianapolis; Ralph U. Leser, Indianapolis, and Ralph R. Mellon.

During the business meeting the following motion was offered by Dr. H. S. VanOsdol, Indianapolis: That the Section go on record as opposing interns doing any surgery unless they have a residency. This motion carried.

Election of officers resulted as follows:

CHAIRMAN, W. F. HUGHES, M.D., Indianapolis
VICE-CHAIRMAN, R. M. DEARMIN, M.D., INDIANAPOLIS
SECRETARY, E. O. ALVIS, M.D., INDIANAPOLIS

The Section adjourned at 5:45 p. m.

SECTION ON ANESTHESIA

The Section on Anesthesia of the Indiana State Medical Association convened at the French Lick Springs Hotel, French Lick, Wednesday afternoon, October 30, 1940, at 2:30 p. m., following a luncheon meeting in honor of Dr. E. A. Rovenstine of New York. Dr. E. T. Zaring, Terre Haute, chairman, presided.

The first paper on the program was by Dr. W. B. Adams of Indianapolis, on the subject, "A Year of Anesthesia at Indianapolis City Hospital." The chairman announced that Dr. Adams recently was transferred to North Carolina, and that his paper had been left with Dr. Lillian Mueller, who presented it for Dr. Adams. The paper was discussed by Dr. John M. Whitehead, Indianapolis.

The second paper was presented by the guest speaker, Dr. E. A. Rovenstine of New York City, whose subject was "Circulatory Disturbances During Anesthesia." The discussion was opened by Dr. Charles N. Combs of Terre Haute who was followed by Dr. G. O. Larson, LaPorte, Dr. Roy A. Geider of Indianapolis, Dr. J. N. Kelly of LaPorte, Dr. Ralph Sappenfield of Miami, Florida, Dr. Floyd T. Romberger of Lafayette, and in closing, by Dr. Rovenstine.

The third paper was presented by Dr. Floyd T. Romberger of Lafayette. His subject was "The Flammability of Anesthetic Agents." Dr. Romberger's paper was illustrated with lantern slides.

Discussion of Dr. Romberger's paper was led by Dr. E. A. Rovenstine of New York; Dr. Lillian Mueller of Indianapolis, Dr. Romberger, and Dr. C. N. Combs followed with discussions.

Election of officers resulted as follows:

CHAIRMAN, LILLAN MUELLER, M.D., INDIANAPOLIS
VICE-CHAIRMAN, E. P. BUCKLEY, JEFFERSONVILLE
SECRETARY, F. W. RATCLIFF, M.D., LAFAYETTE

The meeting adjourned at five o'clock.

INDIANA STATE MEDICAL ASSOCIATION

EXECUTIVE COMMITTEE

October 28, 1940.

Roll call showed the following present: C. A. Nafe, M.D., chairman; C. H. McCaskey, M.D.; K. R. Ruddell, M.D.; A. M. Mitchell, M.D.; M. A. Austin, M.D.; A. F. Weyerbacher, M.D.; Albert Stump, attorney, and T. A. Hendricks, executive secretary.

The statement of receipts and expenditures for September for THE JOURNAL was approved.

Membership Report

Number of members Oct. 26, 1940	3,180*
Number of members Oct. 26, 1939	3,117
Gain over last year	63
Number of members Dec. 31, 1940	3,145

* Ninety honorary members.

Treasurer's Office

Treasurer's annual report appeared in the October issue of THE JOURNAL.

1940 Annual Session at French Lick, Tuesday, Wednesday and Thursday, October 29, 30, and 31, 1940

Final report on commercial exhibit.

31 spaces sold to 28 exhibitors ... $2,965.00

Banquet seating arrangements. The committee felt that the precedent should not be broken and that the president of the national woman's auxiliary should be seated at the Auxiliary table and not at the speakers' table. The president is to introduce both Mrs. V. E. Holcombe, president of the national auxiliary, and Mrs. W. E. Tinney, president of the state auxiliary.

The committee decided that Dr. Karl Ruddell, president of the association, should preside at the national defense luncheon and he should introduce Dr. Charles R. Bird, chairman of the M-Day Committee of the state medical association.

Changes in Constitution and By-Laws. The committee reviewed the amendments to the Constitution and By-Laws which were to be considered by the House of Delegates.

Heart bulletins. The committee approved the distribution of bulletins upon heart disease as requested by Dr. R. M. Moore of Indianapolis, chairman of the Scientific Work Committee.

State membership certificates. This matter was to be referred to the Council along with a letter from Dr. W. G. French.

Annual registration fee. Action of Clay County Medical Society recommending annual registration fee brought to the attention of the committee.

Poliomyelitis exhibit. The Executive Committee approved the poliomyelitis exhibit sponsored by the State Department of Public Welfare.

Legislative, Legal and Social Security Matters

National

Letter from Congressman Larrabee. A letter from Dr. William H. Larrabee, Congressman for the Eleventh District, objecting to the communications being sent to the physicians by the National Physicians' Committee for Willkie stating that the Democratic party is for socialized medicine, brought to the attention of the committee, along with a letter from Dr. Olin West, reading in part as follows:

> "It seems that there are several groups that apparently have taken an active interest in the present political campaign. There is, however, one thing that I do know very definitely and that is that the American Medical Association has not engaged in promoting political propaganda."

Indefinite postponement of A.M.A. suit. This suit against the A.M.A. has been indefinitely postponed, which, according to the attorney of the association, means that although the suit is definitely withdrawn it might indicate that the suit will not be placed on the docket again.

Local

Statements by candidates for Governor. Both Hillis and Schricker have issued statements, which appeared in the November issue of THE JOURNAL, opposing socialized medicine.

State Board of Health

Resignation of Dr. Verne K. Harvey. The committee expressed its regret that Dr. Verne K. Harvey had resigned as secretary of the State Board of Health and at the same time it expressed its best wishes to Dr. Harvey in his new position as head of the medical department of the United States Civil Service Commission. The committee also expressed its confidence in Dr. John W. Ferree, who has been appointed in Dr. Harvey's place.

Group Hospitalization and Group Medical Practice

Recommendations of president. Dr. Karl Ruddell, president of the association, recommends in his address that "legislation properly safeguarded, making possible plans for both non-profit group hospitalization and group medical care, be introduced in the next legislature."

Recommendations of Permanent Study Committee on Health Insurance. Recommendations of this committee, along with Dr. Ruddell's recommendation, will be placed before the House of Delegates and will be passed upon by that body.

Action by Lake County Medical Society. Committee informed that the Lake County Medical Society held a special meeting to discuss "a medical and surgical care plan for Lake County which for more than six months has been successfully operated, statewide, by the Michigan State Medical Association through its 'Michigan Medical Service, Inc.' This plan provides that patients may make regular monthly payments into a fund out of which physicians will be reimbursed for services in accordance with the provisions of the plan."

Medical Economics

Correspondence from the Bureau of Legal Medicine and Legislation of the American Medical Association in regard to physicians paying income taxes upon money which is on their books but not collected, turned over to Albert Stump, attorney

for the association. Mr. Stump is to report upon this matter at the next meeting of the Executive Committee.

Medical Relief

Letter received from Leo X. Smith, attorney for the Township Trustees Association, explaining why the Township Trustees Association would be opposed to placing the entire responsibility for commitment of indigent patients to hospitals in the hands of the county judges brought to the attention of the committee.

Letter received from Dr. H. C. Ragsdale in regard to the poor relief situation in Lawrence County brought to the attention of the committee. Copies of this letter had been forwarded to Mr. Smith and Mr. Stump, who answered Dr. Ragsdale direct.

Monthly report upon WPA cases for September brought to the attention of the committee. The committee suggested that this report be sent to Dr. J. S. Leffel, chairman of the Medical Relief Committee.

State Board of Medical Registration and Examination and Cult Study Committee

Better Business Bureau report. The committee approved the suggestion that Dr. Nafe as chairman make a report to the House of Delegates in executive session on the Better Business Bureau activities.

Legal Rights of Osteopaths. Letter received from physician inquiring as to the legal rights of osteopaths. This question was answered by Albert Stump.

Unlicensed osteopath. Letter received from an osteopath in regard to Leo Hurley of Rensselaer, who is practicing osteopathy without a diploma. This letter was referred to the osteopathic member of the State Board of Medical Registration and Examination.

Chiropractic legislative program. A confidential report upon the convention of the Indiana Chiropractors Association, held at Richmond, October 13 to 15, 1940, was made to the committee. Committee informed that H. K. McIlroy had asked if the state association would cooperate with him and approve his proposed chiropractic bill which calls for the creation of a separate board. The committee saw no grounds for any discussion whatsoever with McIlroy in regard to this matter.

Naturopathy. The committee was informed that the following is now the official definition of naturopathy as adopted by the American Association of Naturopathic Physicians, Inc.:

> "*Naturopathy*—A SYSTEM OF MEDICINE, made up of proven selections from all the schools of Natural Healing which places the chief emphasis on assisting Nature in reconstructing and rebuilding the human body to ward off disease, by the use of Herbal Remedies and supplying to the system the lacking Cell Salts, Tissue Remedies and Vitamins; by manual manipulations, assisted by Electric therapy, restore to normal, Circulation, Assimilation and Elimination, to maintain the well-being of the organs and the body as a whole in health and eliminating disease."

Military Preparedness

Letter from the Governor. The following letter of commendation for cooperation rendered the Governor and the Adjutant General's office in compiling a list of physicians to serve on selective service boards was brought to the attention of the committee:

> "I believe you will be interested in knowing that the Indiana State Medical Association has been of invaluable assistance to me in selecting Examining Physicians, Assistant Examining Physicians, Medical Advisory Board members, and medical members for Boards of Appeal for the administration of the Selective Training and Service Act of 1940, in Indiana.
>
> "The Indiana State Medical Association, at my request, made recommendations for all of the above positions, and without exception the recommendations made to me by the Association have been appointed.
>
> "Karl R. Ruddell, M.D., the President of the Indiana State Medical Association, has been generously cooperative. Mr. Thomas A. Hendricks, the Executive Secretary of the Indiana State Medical Association, has been untiring in his highly successful effort to procure for me excellent medical personnel for the administration of Selective Service in Indiana.
>
> "The Indiana State Medical Association can indeed be proud and gratified, as I am, of its fine work and cooperation in this emergency."

This letter was addressed to Dr. Irvin Abell, chairman of the Military Affairs Committee of the American Medical Association.

Medical Advisory Board situation in Allen county. The committee was informed that several letters had been received from the doctors of Allen county complaining about the make-up of the Medical Advisory Board for the Fourth Congressional (12th Medical) District.

Marion county resolution. Resolution to be presented by the Marion county delegates to the House of Delegates setting up plans whereby local societies could make arrangements so that doctors who are called to service receive compensation from the substitute physicians who treat their patients while they are absent.

Congressional Advisory Boards. List of examiners on Congressional Advisory Boards presented to the committee.

Colored physicians on service boards. Committee notified that colored physicians are to serve on selective service boards. The names of these physicians are to be obtained from the Aesculapian (colored) Medical Society.

Induction boards. Letters asking for volunteers to serve on these boards sent out by the M-Day

Committee and several physicians have indicated their desire to serve on these boards.

Remediable defects in draftees. Letter from Dr. Herman Baker suggesting that the state association "get the jump on other organizations by using an already existing committee or appointing a special committee to study what might be done with the problem of correcting remediable defects in draftees" brought to the attention of the Committee.

Farm Security Administration

The secretary reported that a conversation had been held with Victor H. Davison, State Community and Cooperative Specialist of the Farm Security Administration, in regard to a new plan for payment of physicians' bills for services rendered farm relief clients.

Future Medical Meetings

Postgraduate courses in obstetrics. These courses are offered to the various district medical societies.

Thirteenth District Medical Society. All members of the committee are invited to attend this meeting which is to be held at Goshen on November 13.

New Councilor

Committee notified that Dr. J. C. Elliott of Guilford had been appointed councilor pro tem to succeed Dr. M. C. McKain of Columbus who was killed recently in an automobile accident.

Refugee Children of British Physicians

Letter received from Dr. L. L. Bernstein of Brooklyn, New York, asking that American physicians take care of children of British physicians. The committee felt that this opportunity should not be given to children of physicians alone but to all British children. There being no further business, the meeting was adjourned.

LOCAL SOCIETY REPORTS

Adams County Medical Society members held a meeting at the Elks Home, at Decatur, November first. Dr. C. C. Rayl, of Decatur, gave a report of the state convention.

* * *

Carroll County Medical Society members were entertained at the home of Dr. and Mrs. G. W. Wagoner, at Burrows, on November seventh. Dr. J. Thayer Waldo, of Indianapolis, was the principal speaker.

* * *

Delaware-Blackford County Medical Society members met at Hotel Roberts, at Muncie, on October fifteenth. Dr. J. C. Silvers, of Muncie, talked on "Organotherapy of Menstrual Irregularities," and Dr. Nila Covalt, of Muncie, talked on "Organotherapy of the Menopause." Thirty-eight members and guests attended this meeting.

Dearborn-Ohio County Medical Society members held a meeting at the Dearborn Country Club on October twenty-fourth. Dr. W. F. Machle, of Cincinnati, addressed the society on the subject, "Diagnosis of Industrial Diseases." Managers and industrial heads of Lawrenceburg and Aurora were special guests at the meeting. Twenty-five members were in attendance.

* * *

Fayette-Franklin County Medical Society members met at the McFarlan Hotel on October eighth. Eleven members were present. Dr. Maynard Austin, of Anderson, spoke on "The Trend or End of the Family Physician."

* * *

Floyd County Medical Society members held a dinner meeting at New Albany on October eleventh. Dr. Parvin Davis, of New Albany, discussed "Foot Ailments." Fourteen members attended this meeting.

On November eighth the Floyd County Medical Society met at New Albany. This was a dinner meeting. Dr. Frances T. Brown, of Indianapolis, was the principal speaker, her subject being "The Feeding and Care of the Premature Infant." Motion pictures were shown. Eighteen members attended this meeting.

* * *

Fort Wayne (Allen) County Medical Society members held a dinner meeting at the Irene Byron Sanitorium, at Fort Wayne, on October fifteenth. Ninety members attended this meeting. The guest speaker was Dr. J. Arthur Meyers, Professor of Preventative Medicine, University of Minnesota, who spoke on "The Control of Tuberculosis."

On October twenty-second a meeting was held by the Fort Wayne (Allen) County Medical Society at the Chamber of Commerce Building, at Fort Wayne. Dr. Leslie Wilson, of Fort Wayne, discussed "Wound Healing." Thirty-eight members were in attendance.

At the November fifth meeting of the society, held in the Chamber of Commerce Building, Dr. A. N. Ferguson, of Fort Wayne, gave a paper entitled "Disease of the Coronary Arteries." After the meeting a buffet luncheon was served to the members by the Medical Arts Pharmacy. Forty-six members were in attendance.

* * *

Gibson County Medical Society members met at the Emerson Hotel, at Princeton, on October fourteenth, with twenty-three members present. Dr. Daniel L. Sexton, of St. Louis, Missouri, spoke on "Endocrine Treatment in General Practice."

On November eleventh the Gibson County Medical Society held a meeting at the Emerson Hotel, with nineteen members in attendance. Dr. E. J. Teeter, of Indianapolis, was the principal speaker, his subject being "Diagnosis and Treatment of the Anemias." Motion pictures and lantern slides were also shown.

Greene County Medical Society members held a meeting at the Greene County Hospital, at Linton, on October seventeenth. Dr. H. B. Mettel and Miss Worstler, R.N., of Indianapolis, spoke on "Care of the Premature." Motion picture illustrations followed the talks. Thirteen members attended this meeting.

* * *

Hendricks County Medical Society members met at Danville on October twenty-fourth. Fifteen members were present at the meeting. Dr. William F. King, of Indianapolis, discussed "Clinical Pictures of Blood Dyscrasia."

* * *

Howard County Medical Society members held a meeting at the Frances Hotel, at Kokomo, on November first. Dr. Thomas M. Conley, of Kokomo, gave a paper entitled "Brain Tumors in Children." Twenty-three members attended this meeting.

* * *

Huntington County Medical Society members held a meeting at Hotel Lafontaine, Huntington, on November twelfth. Dr. J. J. Hayes, of Fort Wayne, discussed "Pathology of the Appendix." Nine members attended this meeting.

* * *

Indianapolis (Marion County) Medical Society members met at the Indianapolis Athletic Club on October twenty-second. Dr. W. D. Gatch, of Indianapolis, spoke on "Surgical Aphorisms"; Dr. J. Neill Garber, of Indianapolis, spoke on "Clinical and Pathological Aspects of Volkman's Contractures"; and Dr. J. S. Browning, of Indianapolis, spoke on "Tests of Cardiac Function."

On November twelfth the society held a dinner meeting at the Indianapolis Athletic Club. Lieutenant Colonel Robinson Hitchcock spoke on "National Defense and the Indiana Selective Service Plan."

On November fifth the Indianapolis Medical Society members met at the Indianapolis Athletic Club. Four papers on "Pneumonia" were read by Drs. J. A. MacDonald, Don E. Wood, J. O. Ritchey, and C. J. Clark.

* * *

Lake County Medical Society members held their annual dinner meeting at the Crown Point Tuberculosis Sanitarium on October tenth. Ninety members attended this meeting. The speakers were Dr. Robert G. Bloch, of Chicago, who spoke on "Bronchiectasis," and Dr. James A. Britton, of Chicago, who spoke on "Differential Diagnosis of Diseases of the Chest."

* * *

LaPorte County Medical Society members met at LaCrosse on October seventeenth. Dr. H. O. Mertz, of Indianapolis, was the main speaker, his subject being "Urinary Antiseptics." Twenty-four members were in attendance.

* * *

Muncie Academy of Medicine members met in the ballroom of the Hotel Roberts, at Muncie, on November twelfth. Dr. Carl P. Huber, of Indianapolis, was the principal speaker. His topic was "Bleeding During Pregnancy."

* * *

Northeastern Indiana Academy of Medicine members held a dinner meeting at the Kendall Hotel in Kendallville on October twenty-fourth. Dr. Thurman B. Rice, of Indianapolis, discussed the subject, "Practical Use of Bacterial Vaccines." Physicians from Noble, Lagrange, Steuben, and Dekalb counties attended this meeting. Thirty-five were in attendance.

* * *

Randolph County Medical Society members held their regular monthly meeting on November fourth at the Randolph County Hospital, at Winchester. Dr. J. S. Robison, of Winchester, gave a report on the state convention held at French Lick in October.

* * *

Tri-County Medical Society members met October twenty-second in the Plainville Christian Church to hear Dr. Thompson Rice, of Petersburg, give a paper on "Pulmonary Tuberculosis."

* * *

Seventh District Medical Society members held their annual meeting October sixteenth at the Country Club at Franklin. A medical program was presented in the afternoon, followed by a dinner in the evening. Dr. H. Willan, of Martinsville, spoke on "The Conception, Birth, and Early Childhood of the A.M.A." Dr. Harry A. Towsley, of Ann Arbor, spoke on "Diagnosis and Treatment of Acute Contagious Diseases of Children."

UNION DISTRICT MEDICAL ASSOCIATION

The one hundred forty-fifth semi-annual meeting of the Union District Medical Association was held Thursday, October twenty-fourth, at the Richmond State Hospital, Richmond, Indiana. Dr. Will A. Thompson of Liberty presided as president; Dr. G. A. Herman of Hamilton, Ohio, was vice-president, and Dr. P. W. Blossom of Richmond, Indiana, was secretary-treasurer.

The program began at 8:30 in the morning with a clinic and demonstration of the use of insulin shock in the treatment of dementia praecox by Dr. E. F. Jones of the Richmond State Hospital.

Dr. Charles R. Bird of Indianapolis, chairman of the M-Day Committee for the Indiana State Medical Association, talked on "Present and Future Relation of Mobilization to the Medical Profession."

Attendants at the meeting were guests of Dr. Richard Schillinger, superintendent of the Richmond State Hospital, for dinner at noon.

In the afternoon, Dr. C. Herbert Cronick of Indianapolis talked on "Modern Methods in Neuropsychiatry," and Dr. Robert M. Moore of Indianapolis discussed "Coronary Artery Disease."

New officers were elected as follows: President, Dr. Paul W. Blossom, Richmond, Indiana; vice-

president, Dr. H. L. Burdshall, Hamilton, Ohio; secretary-treasurer, Dr. Leon T. Cox, Fountain City, Indiana.

The next meeting of the association will be held in Rushville, Indiana, April twenty-fourth, 1941.

WOMAN'S AUXILIARY INDIANA STATE MEDICAL ASSOCIATION

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At the twelfth annual convention of the Woman's Auxiliary to the Indiana State Medical Association, held on October 29th, 30th, and 31st, in French Lick, entertainment and business seemed to run so smoothly that it appeared to move of its own volition. However, to create this desirable impression, the entire Auxiliary to the Orange County Medical Society had worked together as the Women's Entertainment Committee, and had planned a delightful program. This included a reception in honor of Mrs. W. E. Tinney, state president, and county auxiliary presidents, a breakfast, luncheon at the Country Club, tea at Spring Mill Park, dinners, bridge, dancing, and even periods for sports of one's choice. Mrs. George Dillinger, of French Lick, was chairman, assisted by her committee members, Mrs. C. E. Boyd, Mrs. H. L. Miller, Mrs. J. R. Dillinger, Mrs. C. D. Fulkerson, Mrs. Ivan Clark, Mrs. J. K. Spears, Mrs. Keith Hammond, Mrs. R. E. Baker, Mrs. W. E. Schoolfield, Mrs. Sam L. Scott, Mrs. G. G. Colglazier.

Expedition was the keynote throughout the annual business meeting of the Woman's Auxiliary to the Indiana State Medical Association which followed the breakfast on Wednesday, October 30. The meeting opened promptly at nine o'clock, and from that time on every minute was filled.

An innovation this year was the impressive *In Memoriam* service, in which Mrs. Van Cleave read the names of twelve former auxiliary members who had died during the last year. As each name was read, a beautiful red rose was placed in a vase in memory of this member. Those so honored were Mrs. William Davidson, Evansville, a past state president; Mrs. Fred Cheney, Indianapolis; Mrs. O. B. Norman, Indianapolis; Mrs. Ralph Funkhouser, Indianapolis; Mrs. W. A. Spurgeon, Muncie; Mrs. Earl Green, Muncie; Mrs. George Wesley Wagoner, Burrows; Mrs. C. Russell La Bier, Terre Haute; Mrs. Frank Leroy Wedel, Terre Haute; Mrs. Earl Palmer, Logansport; Mrs. D. F. Davis, New Albany, and Mrs. M. B. Strange, New Albany.

When the roll of auxiliary officers and delegates was called, it was found that there were seven past state presidents, eight county auxiliary presidents, twenty-one county auxiliary delegates, and three county auxiliary alternates, making a total of thirty-nine present to conduct official business. The high spots of Mrs. Tinney's presidential address, with which she opened her business session, were expressions of appreciation to all those who had assisted her during the past year, the need to emphasize the county auxiliaries' importance in their relationship to state and national organizations, and the necessity of prompt reports on all local activities. She also urged physicians' wives to be even better informed on subjects related to the medical profession in its capacity of public service, during the period when many physicians will be away for army service.

An urgent need of the organization this year has been a budget committee. Previous to this time, the expenses of state officers and committee chairmen for travel and correspondence necessary in their work, have not been paid from organization funds, because dues to the state auxiliary were not large enough to provide sufficient money. Mrs. C. F. Voyles, resolutions chairman, read an amendment, approved by the executive board, which stated that dues should be raised from fifty to seventy-five cents per member, the state to retain two-thirds of this amount and send the rest to the national office.

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OF THE
Indiana State Medical Association

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

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Feet, Tumors of the Hands and (Pack). C. V. Mosby Co. April xxi
Fetal and Neonatal Death (Adair-Pottery). University of Chicago Press..... 226
Foods, Accepted, and Their Nutritional Significance (Council on Foods of the A.M.A.). American Medical Association (r)..... 116
Fractures, Manual of, Dislocations and Epiphyseal Separations (de Brun). The Year Book Publishers April xxi

Graduate Medical Education (Commission on Graduate Medical Education). University of Chicago Press Aug. xxiv

Handbook of Orthopaedic Surgery (Raney-Shands). C. V. Mosby Co.....April xxiv
Hands and Feet, Tumors of the (Pack). C. V. Mosby Co. April xxi
Hearing Aids, Handbook of (Niemoeller). Harvest House Aug. xxiv

Infections, Bacillary and Rickettsial (Holmes). The MacMillan Co..... 644
International Clinics, The New (Pierson). J. B. Lippincott Co. April xxi
Itch, The Emperor's (Friedman). The Froben Press Aug. xxiv

Living (Rice). Scott, Foresman & Co.....Aug. xxiv

Management of Obstetric Difficulties (Titus). C. V. Mosby Co. April xxi
Manual of Fractures, Dislocations and Epiphyseal Separations (de Brun). Year Book Publishers.... April xxi
Materia Medica, Synopsis of, Toxicology, and Pharmacology (Davison). C. V. Mosby Co..... 644
Medical Mycology, An Introduction to (Hopper-Lewis). Year Book Publishers (r)..... 116
Medical Nursing (Eyl-Hull-Wright). F. A. Davis Co. Oct. xxviii
Medical Specialists, Directory of (American Boards —Titus). Columbia University Press (r)..... 390
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Neonatal Death, Fetal and (Adair-Pottery). University of Chicago Press..... 226
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Nervous Diseases, Textbook of (Bing). C. V. Mosby Co. (r) 226
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Patient's Dilemma, The (Cabot). Reynal & Hitchcock, Inc. ---April xxii
Pediatric Practice, The Newer Nutrition in (Kugelmass). J. B. Lippincott Co.---April xxi
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Pneumonia, Chemotherapy and Serum Therapy of (Heffron-Lord-Robinson). The Commonwealth Fund ---332
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Psychiatry for Nurses (Gage-Karnosh). C. V. Mosby Co. ---390
Psychopathia Sexualis (Krafft-Ebing). The Pioneer Publications, Inc. (r)---226
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Rickettsial Infections, Bacillary and (Holmes). The MacMillan Co.---644

Serum Therapy of Pneumonia, Thermotherapy and (Heffron-Lord-Robinson). The Commonwealth Fund ---332
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Shock (Scudder). J. B. Lippincott Co.---April xxii
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Sports, An Anatomical Analysis of (Hawley). A. S. Barnes & Co.---390
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Surgery, Orthopaedic, Handbook of (Raney-Shands). C. V. Mosby Co.---April xxi
Surgery, Synopsis of the Principles of (Berman). C. V. Mosby Co.---Aug. xxiv
Surgical Care, Principles of—Shock and Other Problems (Blalock). C. V. Mosby Co.---Aug. xxiv
Synopsis of Materia Medica, Toxicology, and Pharmacology (Davison). C. V. Mosby Co.---644

Toxicology, Synopsis of Materia Medica and Pharmacology (Davison). C. V. Mosby Co.---644
Trapping the Common Cold (Foster). The Fleming H. Revell Co.---April xxi
Treatise on Medicolegal Ophthalmology, A (Snell). C. V. Mosby Co.---644
Tumors of the Hands and Feet (Pack). C. V. Mosby Co. ---April xxi
Vitamins, The (Council on Pharmacy and Chemistry and the Council on Foods of the A.M.A.). American Medical Association (r)---47
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X-ray Therapy, A Topographic Atlas for (Kaplan-Rubenfeld). Year Book Publishers (r)---47

Year Book of Public Health, 1940 (Geiger). The Year Book Publishers, Inc.---644
Year Book of General Medicine (Dick)---Dec. xxiv

SOCIETIES AND INSTITUTIONS

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Indiana Association of the History of Medicine, Activities of the---May 279
Indiana Regional Fracture Committee---July 394
Indiana State Board of Health—
Monthly Report of the Bureau of Communicable Diseases ---
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Section on Ophthal. and Otolaryn. ---731
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Maternal and Infant Morbidity and Mortality Rates for the State of Indiana, Report of the Subcommittee of the Indiana State Medical Association to Study---April 221
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Woman's Auxiliary to the Indiana State Medical Association---Jan. 52, Feb. 111, Mar. 168, April 221, May 279, June 336, July 395, Sept. 495 and 736

WOMAN'S AUXILIARY

(Continued from page 736)

This amendment was voted upon by the delegates and was passed.

To replace the tiresome committee reports, Mrs. Mendenhall, program chairman, had planned a panel discussion by state chairmen, in which each told of the work of her committee and the opportunities presented in her field. Introductions, addressing of the chair, and such formalities were eliminated and each chairman gave her report promptly and concisely. Mrs. Mendenhall and Mrs. Tinney modeled this plan after that used by the A.M.A. Councilors.

Points gleaned from this panel discussion: Good exhibits, valuable in showing objectives and accomplishments of auxiliaries, may consist of posters, graphs, books of an organization's history, or maps of territory covered in organization work.—The sale of *Hygeia* should be considered by auxiliary members, not as the work of a magazine salesman, but as an opportunity to show an interest in civic welfare. St. Joseph County received honorable mention for *Hygeia* sales at the national convention last year, although, as a state, Indiana ranked low.—In the matter of medical legislation, the auxiliary member can be a great help, first of all by educating herself on proposed measures. She should promote an educational campaign on proposed medical and health laws, but she should cooperate absolutely with the local medical organization in its attitude toward such legislation. No program should ever be sponsored and endorsed, however, without the approval of the state and county societies.—The auxiliary was urged to continue the pioneer physician's memorial work done by Dr. W. N. Wishard for the Indiana State Medical Society.

Surely one of the most ardent workers on the state board this year was Mrs. F. B. Wishard, organization chairman. The purpose of her committee is to create the desire in counties for auxiliaries, to organize new ones and help the old ones. In addition, she is trying to help each county unit to find a project of interest to them. During the past year, through the untiring efforts of Mrs. Wishard and Mrs. Tinney, fifteen new auxiliaries were formed in Indiana. These, in addition to the nine already existent, make a total of twenty-four. Mrs. Wishard outlined five purposes for having auxiliaries: (1) as a social organization to promote friendship among doctors' wives; (2) as a philanthropic enterprise, to undertake some charitable project; (3) as a reserve force to help the medical profession in influencing legislation; (4) as an incentive to educate ourselves on subjects relating to public health and hygiene; and (5) as a group to improve relations of the profession to the public. This can be the greatest service—to create a better understanding between physicians and the public.

Early in the meeting, the national president, Mrs. V. E. Holcombe, of Charleston, West Virginia,

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WOMAN'S AUXILIARY

(Continued from page xxi)

was introduced by Mrs. Tinney, and spoke briefly, but it was not until the discussion of possible state auxiliary projects was opened that she spoke at length. Then we all came under her spell, for she is a truly charming person and radiates vitality and enthusiasm. Mrs. Tinney opened the discussion by suggesting five possible projects: (1) care of old or indigent doctors and their dependents; (2) establishment of a student aid fund for medical students; (3) education of a doctor's son or daughter; (4) establishment of a fund for doctors' widows; and (5) engagement in a medical military preparedness program. She then asked for additional suggestions from Mrs. Holcombe, who told of projects undertaken by various other state auxiliaries. Pennsylvania and Colorado maintain funds for helping old and indigent physicians or their widows. West Virginia was asked by their state society to compile biographies of past presidents of its state medical association, and have progressed very well with this work. South Carolina maintains an excellent student loan fund for medical students in the last two years of their course.

Following the luncheon at the Country Club, Mrs. Holcombe delivered her principal message to the auxiliary, "Why an enlarged circulation of the *Bulletin*?"

"Our project for the year 1940-1941 is to increase the circulation of the *Bulletin*, our official organ. Do you want to know what the Auxiliary stands for? Do you want to know more about the program of the Auxiliary and the working of each of the several committees, Exhibits, Hygeia, Legislation, Organization, Press and Publicity, Health Education and Public Relations? Why so many fine, intelligent women are giving much of their valuable time to this organization? Why the doctors themselves encourage the growth and expansion of our activities as an organization? Read the *Bulletin*, the Auxiliary Digest. Become informed on the whole program of the Woman's Auxiliary to the American Medical Association and its component auxiliaries.

"The *Bulletin* is published for the express purpose of furthering our fellowship and propagating the principles and ideals of our organization. Our members should read this periodical, because it conveys to them information of what other members are doing. A tie of interest and understanding is formed through the channels of information about each other.

"The power of the *Bulletin* in your organization is dependent upon whether it is given a place there or not. No instrument of righteousness, however excellent, can affect for good those whom it has no opportunity to touch. There is no magic power in food to nourish those who fail to partake of it. There is no efficacy in a *Bulletin* that is never read. With your help our *Bulletin* can be made one of the most important reservoirs of thought. With these ideals in mind I ask each member of the Auxiliary to take a renewed interest in the *Bulletin*.

"The immediate goal of our Auxiliary is to increase the circulation of the *Bulletin* to include all members if possible, but at least one-fourth of our Auxiliary membership. I feel confident that the members of the Auxiliary will lend their support to the end that this goal may be reached. With proper support, the Woman's Auxiliary to the A.M.A. will have a periodical of which they may well be proud."

Following the annual breakfast and business meeting of the Woman's Auxiliary to the Indiana State Medical Association, a meeting was called of all past presidents of the organization who might be present. The list of presidents, beginning in 1928, include: Mrs. Frank Cregor, Indianapolis; Mrs. W. R. Davidson, Evansville; Mrs. M. A. Austin, Anderson; Mrs. W. S. Tomlin, Indianapolis; Mrs. L. E. Fritsch, Evansville; Mrs. C. F. Voyles, Indianapolis; Mrs. I. N. Trent, Muncie; Mrs. E. D. Clark, Indianapolis; Mrs. R. L. Compton, Osgood; Mrs. Marcus Ravdin, Evansville; Mrs. F. B. Wishard, Pendleton; Mrs. M. B. Van Cleave, Evansville; and Mrs. W. E. Tinney, Indianapolis. During the meeting, Mrs. Cregor was elected president, Mrs. Wishard first vice-president, and Mrs. Austin secretary.

BOOKS

Books Received

THE 1940 YEAR BOOK OF GENERAL MEDICINE. **Infectious Diseases,** edited by George F. Dick, M.D., Professor of Medicine, University of Chicago; Attending Physician, Billings Memorial Hospital. **Diseases of the Chest** (Excepting the Heart), edited by J. Burns Amberson, Jr., M.D., Professor of Medicine, College of Physicians and Surgeons, Columbia University. **Diseases of the Blood and Blood-Forming Organs; Diseases of the Kidney,** edited by George R. Minot, M.D., S.D., F.R.C.P. (Edinburgh and London), Professor of Medicine, Harvard University; Director, Thorndike Memorial Laboratory; Visiting Physician, Boston City Hospital; and William B. Castle, M.D., A.M., Professor of Medicine, Harvard University; Associate Director, Thorndike Memorial Laboratory; Junior Visiting Physician, Boston City Hospital. **Diseases of the Heart and Blood Vessels,** edited by William D. Stroud, M.D., Professor of Cardiology, Graduate School of Medicine, University of Pennsylvania. **Diseases of the Digestive System and of Metabolism,** edited by George B. Eusterman, M.D., Professor of Medicine, University of Minnesota (Mayo Foundation); Head of Section in Medicine and Chief of Gastro-Enterologic Clinic, Mayo Clinic. 934 pages. Fabrikoid binding. Price $3.00. The Year Book Publishers, Inc., Chicago, 1940.

ABSTRACT

ADDING VITAMIN B_1 TO DIET WILL AID WARTIME EFFICIENCY

The results of recent investigations of vitamin B_1 deficiency "suggest that efficiency for prosecution of a war can be in-

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creased by the simple expedient of providing a very little more of vitamin B_1 than the public is receiving. This subject is also receiving consideration by those responsible for our national defense," *The Journal of the American Medical Association* for Oct. 5 declares in an editorial.

"England, locked in the struggle of total war and conscious of the importance of maintaining at high levels the strength and courage of its people, has fortified margarine with vitamin A and restored calcium and thiamin hydrochloride (vitamin B_1) to flour," the editorial states. "This action was taken on advice from the Medical Research Council and with the recommendation of leaders in nutritional research. Sir John Orr and Dr. J. C. Drummond were largely responsible. In consequence, ill effects from deficiency of calcium and vitamin B_1 will be minimized in England notwithstanding lower rations. Vitamin A will accompany whatever edible fats remain available, and calcium and vitamin B_1 will be supplied as long as any cereal food is left.

"The slim margin that exists between man's physiologic requirements for vitamin B_1 and his intake of this vitamin has long been known; also the fact that storage of this vitamin is minimal and that debility quickly follows when men are deprived of it. The diets of half the population of England were found to provide a level of intake of vitamin B_1 less than that which the League of Nations Technical Commission regarded as necessary for adult men in peace time. That level was 300 international units a day. For soldiers, however, for men in factories and on the farms, in war time, for long work and short sleep, a level of 300 international units is certainly not optimal.

"The Stiebling report from the United States Department of Agriculture (June 1940) revealed a large proportion of 'poor' diets in peaceful America with its bursting granaries and troublesome problems of over-production. The diets were poor in vitamins A, D and B_1, and in calcium. To some extent they were poor for lack of purchasing power, but to a large extent they were poor because of lack of skill in getting good food values for food expenditures. When white flour and sugar provide 50 per cent of the calories, as is the case in England and America, selection of a diet that can be called good, in the sense that it satisfies more than minimal requirements for vitamin B_1 and calcium, is almost impossible except for an expert.

"Recent reports on induced vitamin B_1 deficiency bear directly on the importance of a liberal allowance of vitamin B_1 for a people engaged in war. Restriction of the intake of this vitamin in a group of healthy subjects, otherwise adequately fed, provoked, among other signs and symptoms, moodiness, sluggishness, indifference, fear, and mental and physical fatigue. The states of mind and body observed in these subjects were such as would be least desirable in a population facing invasion, when maintenance of stamina, determination and hope may mean defeat or successful resistance.

"Other subjects in the experiment mentioned received thiamin hydrochloride in such an amount that their intake of thiamin would be almost, if not quite, up to the standard set for this vitamin by the League of Nations Technical Commission. These subjects remained in apparent good health for weeks, but when, at the end, more of this vitamin was administered—enough to raise the intake to 600 international units a day—alertness increased and measured capacity for physical work was almost doubled."

INDIANA STATE BOARD OF HEALTH

Bureau of Communicable Diseases

MONTHLY REPORT, SEPTEMBER 1940

Diseases	*Sept. 1940*	*Aug. 1940*	*July 1940*	*Sept. 1939*	*Sept. 1938*
Tuberculosis	187	225	147	141	87
Chickenpox	43	19	26	25	11
Measles	26	22	29	19	10
Scarlet Fever	87	73	61	204	143
Smallpox	0	1	4	5	14
Typhoid Fever	28	19	14	54	42
Whooping Cough	88	74	75	260	35
Diphtheria	29	22	19	67	39
Influenza	33	9	8	24	38
Pneumonia	31	30	29	33	46
Mumps	18	24	33	35	13
Poliomyelitis	232	261	19	12	1
Meningitis	2	2	4	0	4
Bacillary Dysentery	7	2	1	72	0
Tularemia	2	1	0	1	0
Undulant Fever	5	4	7	3	3
Rocky Mountain Spotted Fever	2	2	3	3	3
Rabies in Man	1	0	0	0	0
Septic Sore Throat	1	1	0	0	0
Gonorrheal Ophthalmia	1	0	0	0	0

MONTHLY REPORT, OCTOBER 1940

Diseases	*Oct. 1940*	*Sept. 1940*	*Aug. 1940*	*Oct. 1940*	*Oct. 1940*
Tuberculosis	113	187	225	92	167
Chickenpox	166	43	19	128	82
Measles	35	26	22	30	33
Scarlet Fever	200	87	73	320	496
Smallpox	4	0	1	24	29
Typhoid Fever	15	28	19	8	27
Whooping Cough	74	88	74	155	107
Diphtheria	33	29	22	89	165
Influenza	21	33	9	10	62
Pneumonia	36	31	30	23	73
Mumps	35	18	24	54	23
Poliomyelitis	89	232	261	19	6
Meningitis	6	2	2	2	4
Tetanus	1	0	1	0	0
Erysipelas	2	0	0	0	0
Rocky Mountain Spotted Fever	1	2	2	1	1
Undulant Fever	1	5	4	8	3
Typhus Fever	1	0	0	0	0
Septic Sore Throat	2	1	1	4	1
Malaria	1	0	15	27	23
Bacillary Dysentery	1	7	2	0	0

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